IRENE OWEN ANDREWS

Frontispiece Vol. I.

A

TOUR

IN

IRELAND:

WITH

GENERAL OBSERVATIONS

ON THE

PRESENT STATE OF THAT KINGDOM.

MADE IN

THE YEARS 1776, 1777, and 1778.

AND

BROUGHT DOWN TO THE END OF 1779.

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M.DCC.LXXX.

PREFACE.

NUMEROUS as the publications on husbandry have become in almost every part of Europe, few of them let us into its actual state in any country. Authors seem to have disdained recording the practice, so much have they been employed in prescribing alterations. Several reasons may be assigned for this omission: to describe the agriculture of a province, it is necessary to travel into it, and among the writers who have been most voluminous upon this subject, the greater number have been confined to their own farms,---perhaps to their fire sides. It was impossible for them to have given detailed descriptions of what they had never seen.

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There is alſo a greater temptation to the production of ſuch didactic works as are moſt uſual in agriculture, than to the leſs entertaining minutiæ of common management. The man who compoſes a piece for inſtructing others how to conduct their lands, generally includes all ſorts of ſoils, ſituations, and circumſtances; his views are great, his work comprehenſive, round, and complete, and every reader finds ſomething that ſuits him. The ſucceſs which has attended the *complete bodies*, *general treatiſes*, and *dictionaries* of the ſubject, though compiled by men as much acquainted with aſtronomy, as with agriculture, muſt have been owing to theſe circumſtances: as the good reception of well written, though erroneous theories is, to *the agreeable* bearing away the palm due to *the uſeful* alone. But a reader who would wiſh to receive real information, ſhould readily give up the pleaſure of being amuſed for the uſe of being inſtructed; the number of ſuch, however, will always be comparatively

paratively ſmall, and the writer who aims ſimply at utility, muſt expect his productions to give place to thoſe of a more amuſing turn. When a long courſe of years has proved the importance of the facts he has collected, his labours will probably have their due eſtimation.

The details of common management are dry and unentertaining; nor is it eaſy to render them intereſting by ornaments of ſtyle. The tillage with which the peaſant prepares the ground; the manure with which he fertilizes it; the quantities of the ſeed of the ſeveral ſpecies of grain which he commits to it; and the products that repay his induſtry, neceſſarily in the recital run into chains of repetition, which tire the ear, and fatigue the imagination. Great however is the ſtructure raiſed on this foundation: it may be dry, but it is important, for theſe are the circumſtances upon which depend the wealth, proſperity, and power of nations. The

minutiæ

minutiæ of the farmer's management, low, and ſeemingly inconſiderable as he is, are ſo many links of a chain which connect him with the State. Kings ought not to forget that the ſplendour of majeſty is derived from the ſweat of induſtrious, and too often oppreſſed peaſants. The rapacious conqueror who deſtroys, and the great ſtateſman who protects humanity, are equally indebted for their power to the care with which the farmer cultivates his fields. The monarch of theſe realms muſt know, that when he is ſitting on his throne at Weſtminſter, ſurrounded by nothing but ſtate and magnificence, that the pooreſt, the moſt oppreſſed, the moſt unhappy peaſant, in the remoteſt corner of Ireland, contributes his ſhare to the ſupport of the gaiety that enlivens, and the ſplendour that adorns the ſcene.

If ſuch is the importance of theſe little movements in the great machine of the State, to know and to underſtand them,

them, ſurely deſerves the attention of men, who are willing to ſacrifice their amuſement to their information. This is in other words ſaying, that the ſtate of common huſbandry, in all its variations and connections ought to be well underſtood. Of little conſequence muſt precepts, maxims, and directions for a better conduct appear, unleſs we really know the evils that are to be remedied, and the practices that are to be condemned. Without this neceſſary knowledge, the recommendations of the moſt ingenious ſpeculative author, muſt be almoſt uſeleſs; and the labours of the experimentaliſt, want much of the application which is to render his facts important. The object of every writer in rural œconomics is to make huſbandry better. But before they attempt that, ſhould they not know what it is? This idea has often made me, in reading books of agriculture, lament that the firſt chapter of every practical work, was not a plain detailed account of the common management in the pariſh or neigh-

neighbourhood, where the author lived and wrote.

To render this ſort of knowledge general and complete, it is neceſſary that every gentleman reſiding in the country, and practiſing agriculture, ſhould write and publiſh an account of ſo much as falls within the ſphere of his obſervation: The experience of centuries has ſhewn us how much this may be expected. Were it done, ſuch journies as I have regiſtered and publiſhed, would have been perfectly unneceſſary. A man who has attended ſome years to huſbandry in one place, would have it in his power to gain a far better and more particular account of every circumſtance than it is poſſible a traveller ſhould procure.

Theſe accounts however having no exiſtence, ſuch as I have more than once offered to the public, may have their uſe: what ſhould chiefly induce the reader to think ſo, is their being taken

taken on the ſpot, from the mouths of gentlemen or farmers who reſide in the diſtricts, they deſcribe---that the accounts are however perfect, cannot be expected---they are proportionally ſo to the ſagacity, information, and experience of the perſon who ſpeaks. When my intelligence was received from a company of gentlemen, I always waited for their ſettling among themſelves any difference of opinion before I entered the minute; and if they did not agree, took the average of the ſums or quantities in queſtion.

The unbounded hoſpitality of a kingdom in which every country gentleman is by neceſſity a farmer, left me under very few difficulties, in gaining intelligence: but I did not truſt entirely to this ſource, having upon moſt occaſions common farmers ſummoned to aſſiſt at the conſultations, the deſign of which was my information. Nor did I neglect opportunities of making enquiries of the cottagers, and of examining

mining into their ſituation and way of living---the information I procured in this line, I apprehend to be of conſequence: in England we know pretty well the ſtate of the poor, but their circumſtances in other countries ought to be one of the firſt objects of a traveller's attention, ſince fr m their eaſe or oppreſſion, a multitude of concluſions may be drawn relative to government, wealth, and national proſperity.

That the agriculture of both theſe iſlands is of the higheſt importance, no one will deny, and perhaps, when the preſent ſtate of Europe is well conſidered, it will in a political light be deemed more ſo than ever it was at any former period. It is true we are at preſent in a war with France, but I muſt own, the period appears to me faſt approaching, when all the weſtern part of Europe will find an abſolute neceſſity of uniting in the cloſeſt bands. If the ſcene which has annihilated Dantzick, was now acting at Hamburgh and Amſterdam,

dam, I do not ſee where the power is to be found, to prevent or revenge it. The conſequence of France has been long declining, and the transfer of her exertions from the land to the ſea ſervice, may be fatal to the liberties of Europe. If ever the fatal day comes, when that exertion is to be made, all her neighbours would feel it their common intereſt to ſecond and ſupport her. Much would it then be regretted, that the ſtrength and reſources of thoſe powers ſhould have been ſo exhauſted by wars among themſelves, as to be diſabled in the moment when moſt ſignally wanted. Then it would appear, that France ſhould have directed all her attention to her army, and Britain to her navy, as the beſt united means of reſiſting what Lord Cheſterfield very juſtly terms, "new devils," ariſing in Europe. But from whatever quarter danger may ariſe to Great Britain, it much behoves her, while other powers are riſing ſo incredibly in force, to take every means that providence permits,

to

to ſtrengthen herſelf; and that the moſt ſecure and ſolid way of doing this, is by carrying all the arts of cultivation in both iſlands, to the higheſt pitch of perfection that is practical, no body will I apprehend deny.

That too much national attention cannot be given to agriculture, never appeared ſo ſtrong as it does in the preſent period. The legiſlature of this kingdom has for a century bent all its endeavours to promote the *commercial ſyſtem*. The ſtatute book is crouded with laws for the encouragement of manufactures, commerce, and colonies, and in ſome inſtances at the expenſe of the improvement of the national ſoil. Yet in that period only one great agricultural meaſure was embraced, the bounty on the export of corn, frittered down to the preſent ſyſtem, which turns out with or without, but certainly by the connivance of law, to be a conſtant *import ſcheme*, in order to reduce the prices of the earth's products, in favour of thoſe

thoſe claſſes whoſe monopolizing ſpirit has had the direct tendency to beggar and ruin the kingdom. Whoever conſiders attentively the *commercial* conduct of Great Britain, will not think there is any thing paradoxical in this aſſertion.

The entire adminiſtration of the colonies has been commercial. It has been made a trader's project, and the ſpirit of monopoly pervaded every ſtep of our progreſs in planting and rearing thoſe ſettlements. They were governed by the narrow ſpirit of a counting houſe, which in the plantation of countries formed to be the reſidence of great nations, neither ſaw nor permitted any thing better than a monopolized market. It was this ſpirit that ſhackled thoſe countries in ſuch commercial fetters as to render them incapable of contributing to the neceſſities of the general government of the empire. Had a more liberal policy been embraced, ſuch contributions would have been early introduced, with a capability (from a free com-

commerce) of ſupporting them. The commercial government gave up the advantage of all contribution for the greater profit of monopoly: it was evident that *both* could not be had, till thoſe countries became too great and powerful to be forced into new and unjuſt habits. Nothing therefore can be more idle than to ſay that this ſet of men, or the other adminiſtration, or that great miniſter, occaſioned the American war. It was not the ſtamp act, nor the repeal of the ſtamp act; it was neither Lord Rockingham nor Lord North, but it was that baleful monopolizing ſpirit of commerce that wiſhed to govern great nations, on the maxims of the counter. That did govern them ſo; and in the caſe of Ireland and the Indies does ſtill govern them ſo. Had not the trader's ſyſtem been embraced, America would, in conſequence of taxation, have been long ago united with Britain; but our traders knew very well that a free commerce would follow a union.

Nor

Nor is it only in the loſs of vaſt territories that we feel the direful effects of the monopolizing ſpirit. The greateſt part of the national debt is owing to the two laſt wars, which coſt us one hundred millions ſterling, and aroſe from mercantile cauſes: that of 1740 was a war for the protection of Engliſh ſmugglers: and that of 1756, ſprung from an apprehenſion that the French would divide the American market with our traders: the preſent, which may be as expenſive before it is finiſhed as either of the former, was owing to a determination to ſecure the market we had gained. But all the wars are for markets or ſmuggling, or trade or manufacture. That vaſt debt which debilitates the kingdom, thoſe taxes we pay for having loſt thirteen provinces and the hazard we now run of loſing or ruining Ireland, are all owing to the former predilection of our government for the trading ſyſtem.

I ſhould go much beyond the line of truth to declare, that trade and manufacture

facture are neceſſarily ruinous. The very contrary is my opinion; extenſive manufactures, and a flouriſhing commerce, are the very beſt friends of agriculture, as I have endeavoured to ſhew more at large in my *Political Arithmetic*. What I would urge here is, that trade is an admirable thing; but a trading government a moſt pernicious one. Protect and encourage merchants and manufacturers in every exertion of their induſtry; but liſten not to them in the legiſlature. They never yet were the fathers of a ſcheme that had not monopoly for its principle. It has been the fatality of our government to attend to them on every occaſion. We are, at this moment, in the full maturity of the evils which a legiſlature, influenced by traders, can bring upon a country. Nor can I without aſtoniſhment view the commercial jealouſy that has ariſen in Europe in the laſt 50 years. Other nations have caught of us the commercial ſpirit. They have attributed the effects of the nobleſt and moſt

moſt perfect ſyſtem of freedom the world has ever ſeen, to the *trade* of the country. Deluded mortals! Give your ſubjects the liberty which Engliſhmen enjoy, and trade will ſpring up one among the many luxuriant branches of that wide extended tree. LIBERTY, not trade, has been the cauſe of England's greatneſs. Commerce and all its conſequences have been the *effect*, not the cauſe of our happineſs. France has, with the ſame ſort of folly, overlooked the ſimple and obvious advantage of improving her noble territory for the more precarious profits of trade: and what are the conſequences? She too has hazarded thoſe wars for commerce, which have exhauſted her reſources, mortgaged her revenues, and debilitated every principle of her national ſtrength.

When the preſent monopoly (the true characteriſtic of the commercial ſyſtem) has half beggared Europe with the thirſt of wealth; and that nations have grown wiſer by experience, they

will, it is to be hoped, found their greatneſs in the full cultivation of their territories; the wealth reſulting from that exertion, will remain at home, and be ſecure; nothing in that progreſs will kindle the jealouſy of neighbours ---no vile monopolies---no reſtrictions ---no regulating duties are wanting: perpetual wars, heavy debts, and ruinous taxes, will not be neceſſary to extend and promote agriculture, inſeparable as they have been from commerce.

To a philoſophical eye the preſent conduct of commercial Europe is an inexplicable enigma. The mercantile ſyſtem of England having graſped at and poſſeſſed the monopoly of the North American market, France, in the tranſactions which preceded the war of 1756, manifeſted the plaineſt jealouſy of our power in North America: the moſt ill founded jealouſy, as experience has ſhewn, that could actuate a nation. The two countries engaged in the war upon a ſubject merely commercial; and it coſt, between them, above an hundred

dred millions ſterling, the one to be driven out of Canada, and the other to loſe America by rebellion. Is it poſſible that the rulers of theſe two kingdoms, if they had an inclination to amuſe themſelves with expending ſuch a ſum, had ſo poor a genius that they could not deviſe the means of doing it *at home*, in the encouragement of agriculture and arts; in incloſures, navigations, roads, harbours, the cultivation of waſtes, draining marſhes, raiſing palaces? &c.

In the Duke de Choiſeul's miniſtry we were on the point of another commercial war, we had a greater trade to India than France, and in order to balance it, that kingdom was ready to expend fifty millions more. Then Spain takes commercial umbrage, at our ſettling with commercial views on a rock, the great products of which are ſeals and penguins; the affair could not coſt leſs than five millions; but that is a trifle in the affairs of trade---For ſee, we are now engaged in a freſh career of

commerce with America, and the whole houſe of Bourbon. Upon a moderate computation, France, Spain, and Britain, will each of them ſpend enough in it to improve three or four provinces to the higheſt pitch of cultivation; which inſtead of ſlaughtering three or four hundred thouſand men, and leaving thrice that number of widows and orphans, would render a greater number of families happy for life, and leave a rich and increaſing legacy of eaſe and plenty to their poſterity: and all the ſlaughter, ruin, poverty and deſtruction, that is thus brought on the human ſpecies, is for the ſake of commerce.

It was the commercial ſyſtem that founded thoſe colonies--commercial profits reared them---commercial avarice monopolized them-- and commercial ignorance now wars to recover the poſſeſſion of what is not intrinſically worth the powder and ball that are ſhot away in the quarrel. The ſame baneful commercial genius influences France and Spain to exhauſt their revenues, ruin

their

their ſubjects, and ſtagnate every branch of domeſtic induſtry, for diſtant, ideal, and precarious commercial advantages.

But to return---The manufactures, commerce, and fiſheries of Ireland, are objects of much importance to Great Britain, and as the information I procured concerning them, was chiefly gained on the ſpot, and given me without thoſe intentions of deceiving, which are too common, when ſuch particulars are introduced politically to the world, I believe the reader will not be ſorry at my having given them a place.

The general view of the kingdom I have given from the whole of the intelligence, will I flatter myſelf, throw Ireland into that juſt light, in which ſhe has not hitherto appeared. The many erroneous ideas concerning the rental, wealth, and conſequence of that iſland, with which every book is filled that treats of it, will be here explained. The reader will find the progreſs of national proſperity, its preſent ſtate, and the

the vaſt field of improvement which Ireland will continue, until it comes to be every thing to Britain which the warmeſt patriot could wiſh. For ſo happy a ſtate to arrive, nothing is wanting but this country to change her policy, and cheriſh that induſtry ſhe has hitherto ſeemed ſo anxious to ſhackle.

After having travelled through the greateſt part of the kingdom, I found, upon ſitting down to give an account of thoſe circumſtances, not immediately ariſing from the huſbandry of the country, that I was in want of many public accounts of trade, manufactures, taxes, &c. not to be procured upon a journey. I was for ſome time in correſpondence with ſome friends in Dublin to gain theſe, but after paſſing near a twelvemonth in expectation, I found it would be impoſſible to procure the neceſſary papers without going thither; I accordingly went and reſided nine weeks in that city, very buſily employed in examining and tranſcribing public records and accounts, which enabled me to give ſuch

ſuch a detail of thoſe ſubjects, as has not hitherto been laid before the public. I may without exaggeration aſſert, that all theſe objects for want of induſtry in thoſe who have written concerning Ireland, have been treated in the way of gueſs, conjecture, and declamation, to anſwer particular purpoſes, inſtead of any detail of facts. Part of theſe enquiries may be unintereſting to thoſe who do not reſide in the country, but I am nevertheleſs ſo much convinced of their importance to England, as well as to Ireland, that I have determined to explain them as fully as I was able, tedious as they may appear to thoſe, who read rather for amuſement, than information. Perhaps there would be no impropriety in prefixing to all the productions I venture before the public, this caution: I have been reproached for being tedious, but I profeſs, to treat that ſubject which I think (vainly perhaps) I underſtand, in ſo detailed a manner, that if my pieces were not unentertaining, they would very indifferently anſwer the end, to accompliſh which, I have travelled, practiſed and written. Huſ-

Huſbandry is an art that has hitherto owed leſs to reaſoning than I believe any other. I know not of any diſcoveries, or a ſingle beneficial practice that has clearly flowed from this ſource. But every one is well acquainted with many that have been the reſult of experiment and regiſtered obſervation. There is no people exiſting ſo backward but have ſome good practices to copy, as well as errors to avoid. To deſcribe both is to give a chain of connected facts that muſt, in the end, prove uſeful to ſuch as will read and digeſt them with attention and reflection: but I am ready to admit that this is a ſtudy very far from amuſing. The regiſters of ſuch journies, as I have employed a great deal of time and expenſe in making, muſt neceſſarily be exceedingly dull to thoſe who read for pleaſure: ſo diſagreeable, that they will certainly throw down the volume with as muſt diſguſt as they would tables of arithmetic. The flattering circumſtance of a ſucceſsful publication is not thus to be expected. The preſent age is much too

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idle to buy books that will nòt baniſh *l'ennye* from a ſingle hour. Succeſs depends on amuſement. The hiſtorical performances of this age and nation, which have proved ſo honourable to their authors, would have met with a leſs brilliant ſucceſs, had not the charms of ſtile rendered them as amuſive as a romance. Their extreme popularity is perhaps built on rivalling, not only the authors that had before treated the ſame ſubjects, but Sir Charles Grandiſon and Julia. That this obſervation, however, when applied to books of agriculture is juſt, will appear from the very ill ſucceſs met with by authors of capital merit, and the great ſales that have attended the moſt miſerable performances. The merit of Mr. Liſle's huſbandry has, in many years, carried it but into the ſecond edition. Mr Hitt's treatiſe on huſbandry has not been re-printed, and is very little known, yet there are particulars in it of more merit than half a ſcore volumes that have been ſucceſsful. Even the elegant eſſays on huſbandry of my old and much regretted friend Mr. Harte,

Harte, have not been re-printed. Proofs to which many more might be added, that the public reception does not always mark the merit of a book.

Any real utility that may result from this work out of Ireland, can only be from those who determine steadily to become acquainted with all the facts they can procure, in order to compare, combine, and draw conclusions from them. To men thus scientific, too many facts can never be published; and with such, I flatter myself, I shall be readily pardoned for having added so many to the number. Indeed I sometimes smile in reading performances, the authors of which think me of importance enough to do me the honour of abusing for whole pages together, at the very time that they make extremely free with information they never might have known, had my labours been wrought like their own, at a fire side. But while I am happy in the good opinion, and instructed in the correspondence of some of the first characters in Europe

Europe---while my writings will ſtand the teſt with ſuch men as a Harte, a Haller, and an Arbuthnot, I am perfectly indifferent to the ideas of the Moores, Shirleys, Marſhals, and Wimpeys of the age.

There is one part of theſe papers which particularly demand an apology. I have ventured to recommend to the gentlemen of Ireland ſeveral courſes of huſbandry, as improvements upon what I found them practiſing, and have given directions how they ſhould be performed. This is going a little out of my way; for it is that ſpecies of writing which I am apt to condemn. Inſtructions in this ſubject ſhould, more than in any other, be gathered ſimply from the regiſter of experiments and repeated obſervations: but having been requeſted by many gentlemen on the journey to do it, I have ſubmitted to their opinion, rather in contradiction to my own. I have reflected attentively on the circumſtances of Ireland before I drew up theſe recommendations; and I believe,

I believe, that thoſe who are beſt acquainted with the kingdom, will not think what I have propoſed entirely inapplicable.

Having given ſuch explanations of the deſign of this work as appeared neceſſary, there only remains to inſert the names of thoſe who were pleaſed to favour me with their aſſiſtance in executing it.

To the following perſons only I was indebted for recommendations to Ireland:

The Earl of Shelburne.
The Dowager Lady Middleton.
Mrs. Veſey.
Edmund Burke, Eſq;
Samuel Whitbread, Eſq;
John Arbuthnot, Eſq;
Governor Pownal.
Lord Kenmare.
John Baker Holroyd, Eſq;
David Barclay, Eſq;

Such were the ſmall number of perſons in England, who, before I went, took the trouble to intereſt themſelves in the undertaking. As to the great body of abſentees, knowing that there was not one but could contribute to my being well informed, by cards to their agents,

agents, I took the moſt effectual means of letting them know my intention; but except the few juſt named, the deſign was not happy enough to appear in ſuch a light, as to induce them to contribute to it. Indeed there are too many poſſeſſors of great eſtates in Ireland, who wiſh to know nothing more of it than the remittance of their rents.

The circumſtance was rather diſcouraging, and I began to apprehend that I might want information; but the reception I met at Dublin immediately removed it; and the following liſt of thoſe who were ſo obliging as to take every means of having me perfectly well informed, will ſhew that I was not diſappointed.

The Earl of Harcourt, Lord Lieutenant
Earl of Charlemont, *Dublin*
Mr. Machpharland, *Luttrell's Town*
Rt. Hon. Thomas Conolly
——— Clements, Eſq; *Killadoon*
Colonel Marley, *Celbridge*
Duke of Leinſter, *Caſtleton*
——— Jones, Eſq; *Dolleſton*
Rt. Hon. H. L. Rowley, *Summer Hill*
Earl of Mornington
Rt Hon. William Burton, *Slaine Caſtle*
——— Jeb, Eſq; *Slaine*
Mr. Gerard, *Gibbſtown*

Earl

Earl of Bective, *Heardfort*
Lord Longford, *Packenham*
Captain Johnſton
Rev. Dean Coote, *Shaen Caſtle*
——— Brown, Eſq;
Mr. Butler, near *Carlow*
——— Mercer, Eſq; *Laughlin-bridge*
Gervas Parker Buſh, Eſq; *Kilfaine*
Colonel Nun
Earl of Courtown
Lieut. General Cunninghame, *Mount Kennedy*
Baron Hamilton, *Ballbriggen*
Lord Chief Baron Forſter, *Cullen*
Lord Gosfort, *Market-hill*
His Grace the Lord Primate, *Armagh*
Mr. Wm. Macgeough, *ditto*
Biſhop of Clonfert
Maxwell Cloſe, Eſq;
—— Richardſon, Eſq;
—— Leſlie, Eſq; *Glaſlough*
——— Workman, Eſq; *Mahon*
Right Hon. Wm. Brownlow, *Lurgan*
——— Warren, *Warrenſtown*
Mr. Clibborn, *ditto*
The Biſhop of Down, *Liſburne*
John Alexander, Eſq; *Belfaſt*
——— Portis, Eſq; *ditto*
Arthur Buntin, Eſq; *ditto*
Mr. Holmes, *ditto*
Dr. Halliday, *ditto*
Patrick Savage, Eſq; *Porta Ferry*
——— Ainſworth, Eſq; *Strangford*
John O'Neal, Eſq; *Shane Caſtle*
James Leſlie, Eſq; *Leſlie Hill*
Rev. Mr. Leſlie
Right Hon. Richard Jackſon, *Coleraine*
Robert Alexander, Eſq; *Derry*
Rev. Mr. Bernard
Rev. Mr. Golding, *Clonleigh*
Alexander Montgomery, Eſq; *Mount Charles*
Thomas Neſbit, Eſq;
Sir James Caldwell, Bart. *Caſtle Caldwell*
The Earl of Roſs, *Belleiſle*
Lord Viſc. Inniſkilling, *Florence Court*
Earl of Earnham, *Farnham*
W. G. Newcomen, Eſq; *Ballyclough*
Thomas Mahon, Eſq; *Strokeſtown*
The Biſhop of Elphin, *Elphin*
Biſhop of Kilmore
The Hon. Thomas Fitzmaurice, *Ballymoat*
The Right Hon. Joſhua Cooper, *Mecra*

Lewis

Lewis Irvine, Eſq; *Tanrego*
—— Brown, Eſq; *Sortland*
Rt. Hon. Thomas King, *Ballyna*
Biſhop of Killala, *Killala*
—— Hutchinſon, Eſq; *do.*
The Earl of Altamont, *Weſtport*
Mr. Lindſay, *Hollymount*
His Grace the Archbiſhop of Tuam, *Tuam*
Robert French Eſq; *Moniva*
Mr. Andrew Trench, *Galway*
Frederic Trench, Eſq; *Woodlawn*
Robert Gregory, Eſq; *Kiltartan*
Sir Lucius O'Brien, Bart. *Drummoland*
Mr. Robert Fitzgerald
Mr. Singleton
Mr. Thomas Marks, *Limerick*
Richard Aldworth, Eſq; *Annſgrove*
Lord Donneraile, *Donneraile*
Denham Jephſon, Eſq; *Mallow*
Denham Jephſon, jun. Eſq; *ditto*
Robert Gordon, Eſq; *Newgrove*
St. John Jefferyes, Eſq; *Blarney Caſtle*
Dominick Trent, Eſq; *Dunkettle*
The Earl of Shannon, *Caſtle Martyr*
Robert Longfield, Eſq; *Caſtle Mary*
Earl of Inchiquin, *Roſtellan*
Rev. the Dean of Corke, *Corke*
Rev. Archdeacon Oliver
Sir John Croulthurſt, Bart.
—— Herbert, Eſq; *Mucrus*
Arthur Blennerhaſſet, Eſq; *Arbella*
Earl of Glandore, *Ardfert*
Lord Croſbie, *ditto*
Robert Fitzgerald, Eſq; *Woodford*
Edward Leſlie, Eſq; *Tarbat*
Mrs. Quin, *Adair*
Right Hon. Silver Oliver, *Caſtle Oliver*
Earl of Clanwilliam
——— Macarthy, jun. Eſq; *Spring Houſe*
Mr. Allen
Lord de Montalt, *Dundrum*
Right Hon. Sir Wm. Oſborne, Bart. *Newtown*
—— Moore, Eſq; *Marlefield*
Earl of Tyrone, *Curraghmoor*
Cornelius Bolton, Eſq; *Ballycavern*

Cornelius

Cornelius Bolton, jun. Esq; *ditto*
Richard Nevill, Esq; *Furnefs*
John Lloyd, Esq; *Gloſter*
Peter Holmes, Esq; *Johnſtown*
Michael Head, Esq; *Derry*
Rev. Mr. Lloyd, *Cullen*
Lord Visc. Kingſborough, *Mitchelſtown*

Such are the contributors to this work. It is with the utmoſt pleaſure I reflect on the liberal, polite, and friendly manner in which I was received by ſuch a number of perſons, among whom are many of the moſt diſtinguiſhed characters in Ireland---Characters that would reflect a luſtre upon any nation.

The moſt careleſs eye will diſcern at once the great advantages, which the uncommon, but polite hoſpitality of the nation, united with an eagerneſs to do whatever had the moſt diſtant appearance of being ſerviceable to their country, gave me in deſcribing it. If, with all theſe advantages, Ireland is not in future much better known than ever ſhe was before, the fault is entirely mine, and I have little to plead in extenuation of it.

A TOUR,

A

TOUR, &c.

JUNE 19th, 1776, arrived at Holyhead, after an inſtructive journey through a part of England and Wales I had not ſeen before. Found the packet, the Claremont, captain Taylor, would ſail very ſoon. After a tedious paſſage of twenty-two hours, landed on the 20th, in the morning, at Dunleary, four miles from Dublin, a city which much exceeded my expectation; the public buildings are magnificent, very many of the ſtreets regularly laid out, and exceedingly well built. The front of the parliament-houſe is grand; though not ſo light as a more open finiſhing of the roof would have made it. The apartments are ſpacious, elegant, and convenient, much beyond that heap of confuſion at Weſtminſter, ſo inferior to the magnificence to be looked for in the ſeat of empire. I was ſo fortunate as to arrive juſt in time to ſee Lord Harcourt, with the uſual

ceremonies, prorogue the parliament. Trinity college is a beautiful building and a numerous ſociety; the library is a very fine room, and well filled. The new exchange will be another edifice to do honour to Ireland; it is elegant, coſt 40,000 l. but deſerves a better ſituation. From every thing I ſaw, I was ſtruck with all thoſe appearances of wealth which the capital of a thriving community may be ſuppoſed to exhibit. Happy if I find through the country in diffuſed proſperity the right ſource of this ſplendor! The common computation of inhabitants 200,000, but I ſhould ſuppoſe exaggerated. Others gueſſed the number 140, or 150,000.

June 21ſt, introduced by Colonel Burton to the Lord Lieutenant, who was pleaſed to enter into converſation with me on my intended journey, made many remarks on the agriculture of ſeveral Iriſh counties, and ſhewed himſelf to be an excellent farmer, particularly in draining. Viewed the Duke of Leinſter's houſe, which is a very large ſtone edifice, the front ſimple but elegant, the pediment light, there are ſeveral good rooms; but a circumſtance unrivaled is the court, which is ſpacious and magnificent, the opening behind the houſe is alſo beautiful. In the evening to the Rotunda, a circular room, 90 feet diameter, an imitation of Ranelagh, provided with a band of muſick.

The

The barracks are a vaſt building, raiſed in a plain ſtile, of many diviſions, the principal front is of an immenſe length. They contain every convenience for ten regiments.

June 23d. Lord Charlemont's houſe in Dublin, is equally elegant and convenient, the apartments large, handſome, and well diſpoſed, containing ſome good pictures, particularly one by Rembrandt, of Judas throwing the money on the floor, with a ſtrong expreſſion of guilt and remorſe; the whole group fine. In the ſame room is a portrait of Cæſar Borgia by Titian. The library is a moſt elegant apartment, of about 40 by 30, and of ſuch a height, as to form a pleaſing proportion, the light is well managed, coming in from the cove of the ceiling, and has an exceeding good effect; at one end is a pretty anti-room, with a fine copy of the Venus de Medicis, and at the other, two ſmall rooms, one a cabinet of pictures, and antiquities, the other medals. In the collection alſo of Robert Fitzgerald, Eſq; in Merrion Square, are ſeveral pieces which very well deſerve a traveller's attention.—It was the beſt I ſaw in Dublin. Before I quit that city, I obſerve, on the houſes in general, that what they call their two-roomed ones, are good and convenient. Mr. Latouche's, in Stephen's-Green, I was ſhewn as a model of this ſort, and I found it well contrived, and finiſhed elegantly. Drove to Lord Charlemont's

lemont's villa at Marino, near the city, where his Lordſhip has formed a pleaſing lawn, margined in the higher part by a well-planted thriving ſhrubbery, and on a riſing ground a banqueting room, which ranks very high among the moſt beautiful edifices I have any where ſeen; it has much elegance, lightneſs, and effect, and commands a fine proſpect; the riſing ground on which it ſtands ſlopes off to an agreeable accompanyment of wood, beyond which, on one ſide, is Dublin harbour, which here has the appearance of a noble river crowded with ſhips moving to and from the capital. On the other ſide is a ſhore ſpotted with white buildings, and beyond it the hills of Wicklow, preſenting an outline extremely various. The other part of the view (it would be more perfect if the city was planted out) is varied, in ſome places nothing but wood, in others, breaks of proſpect. The lawn, which is extenſive, is new graſs, and appears to be excellently laid down, the herbage a fine crop of white clover, *(trifolium repens)*, trefoile, rib-graſs, *(plantage lanceolata)*, and other good plants. Returned to Dublin and made inquiries into other points, the prices of proviſions, &c. (for which ſee the tables at the end of the book). The expenſes of a family in proportion to thoſe of London are, as 5 to 8.

Having the year following lived more than two months in Dublin, I am able to ſpeak to a few points, which, as a mere traveller I could

could not have done. The information I before received of the prices of living is correct. Fiſh and poultry are plentiful and very cheap. Good lodgings almoſt as dear as they are in London; though we were well accommodated (dirt excepted) for two guineas and an half a week. All the lower ranks in this city have no idea of Engliſh cleanlineſs, either in apartments, perſons, or cookery. There is a very good ſociety in Dublin in a parliament winter—a great round of dinners, and parties; and balls, and ſuppers every night in the week, ſome of which are very elegant, but you almoſt every where meet a company much too numerous for the ſize of the apartments. They have two aſſemblies on the plan of thoſe of London, in Fiſhamble-ſtreet, and at the Rotunda; and two gentlemens clubs, Anthry's and Daly's, very well regulated; I heard ſome anecdotes of deep play at the latter, though never to the exceſs common at London. An ill-judged and unſucceſsful attempt was made to eſtabliſh the Italian Opera, which exiſted but with ſcarcely any life for this one winter; of courſe they could riſe no higher than a comic one. La buona Figliuola, la Fraſcatana, and il Geloſo in Cimento, were repeatedly performed, or rather murdered, except the parts of Seſtini. The houſe was generally empty and miſerably cold. So much knowledge of the ſtate of a country is gained by hearing the debates of a parliament, that I often frequented the gallery of the houſe

of

of commons. Since Mr. Flood has been ſilenced with the vice-treaſurerſhip of Ireland, Mr. Daly, Mr. Grattan, Sir William Oſborne, and the prime ſerjeant Burgh, are reckoned high among the Iriſh orators. I heard many very eloquent ſpeeches, but I cannot ſay they ſtruck me like the exertion of the abilities of Iriſhmen in the Engliſh houſe of commons, owing perhaps to the reflection both on the ſpeaker and auditor, that the attorney general of England, with a daſh of his pen, can reverſe, alter, or entirely do away the matured reſult of all the eloquence, and all the abilities of this whole aſſembly. Before I conclude with Dublin I ſhall only remark, that walking in the ſtreets there, from the narrowneſs and populouſneſs of the principal thoroughfares, as well as from the dirt and wretchedneſs of the canaille, is a moſt uneaſy and diſguſting exerciſe.

June 24th, left Dublin and paſſed through the Phœnix-park, a very pleaſing ground, at the bottom of which, to the left, the Liffey forms a variety of landſcapes: this is the moſt beautiful environ of Dublin. Take the road to Luttrell's town through a various ſcenery on the banks of the river. That domain is a conſiderable one in extent, being above 400 acres within the wall, Iriſh meaſure; in the front of the houſe is a fine lawn bounded by rich woods, through which are many ridings, four miles in extent. From the

the road towards the houſe, they lead through a very fine glen, by the ſide of a ſtream falling on a rocky bed, through the dark woods, with great variety on the ſides of ſteep ſlopes, at the bottom of which the Liffey is either heard or ſeen indiſtinctly; theſe woods are of great extent, and ſo near the capital, form a retirement exceedingly beautiful. Lord Irnham and Colonel Luttrel have brought in the aſſiſtance of agriculture to add to the beauties of the place, they have kept a part of the lands in cultivation in order to lay them down the better to graſs; 150 acres have been done, and above 200 acres moſt effectually drained in the covered manner filled with ſtones. Theſe works are well executed. The drains are alſo made under the roads in all wet places, with lateral ſhort ones to take off the water inſtead of leaving it, as is common, to ſoak againſt the cauſeway, which is an excellent method. Great uſe has been made of lime-ſtone gravel in the improvements, the effect of which is ſo conſiderable, that in ſeveral ſpots where it was laid on 10 years ago, the ſuperiority of the graſs is now ſimilar to what one would expect from a freſh dunging.

Mr. Macfarlan the ſteward has at ſome diſtance from the grounds a farm which he is bringing into high order. His ditches are large, deep, and well cut, and he has made many drains. Lime he has uſed much, and experimentally againſt ſpots unlimed, and found

found the benefit very great; the ſoil, a ſtrong, wet, ſtoney loam or lime ſtone. He lays 160 barrels an acre, at the expenſe of ſeven pence a barrel, and finds that it will laſt as long as the gravel. For meadow lands, he prefers it mixed with earth, but on tillage gravel. Soot he buys at Dublin for ſowing over the wheat in April to kill the red worm, for which it anſwers, and alſo improves the crop. Another circumſtance in which he differs from the farmers, is cutting ſtraw into chaff, and alſo in beginning to plough his fallows in autumn. He much prefers ploughing with oxen to horſes. The following particulars he gave me of the general ſtate of huſbandry in the county of Dublin: farms about 100 l. a year, more above than under, ſome to 300 l. a year. The ſoil on the ſurface a ſtoney yellow clay, 18 inches deep on lime-ſtone gravel, with ſome exceptions of ſlate-ſtone, rents about 1 l. 11 s. 6 d: from 10 s. 6 d. to 3 l. 3 s. courſes moſt general,

1. Fallow.
2. Wheat. Sow 1 barrel, and get on an average 8 barrels.
3. Oats. Sow 2 barrels, get from 12 to 20.

Sometimes 1. Fallow. 2. Wheat. 3. Oats. 4. Clover. 5. Wheat. 6. Oats. They plough four times for wheat, on clover but once, feed their clover the year through. No ſainfoine.

Many

Many potatoes in the ridgeway 7 feet broad, and the furrows 3½. Cut generally 18 to 24 inches deep, in order to throw up ſome lime-ſtone gravel: always dung for them 320 one horſe loads to an acre at about 5 or 6 to a ton, are ſpread over the 7 feet. Lay the ſets upon the dung, dig a ſpit and ſhovel it; then dig another ſpit, and another ſhovelling, the ſetts 12 inches aſunder; from 4 to 5 barrels plant an acre. Weed, but no hoeing; take them up with the ſpade, and the crop from 60 to 70 barrels: all are planted for home-uſe, but they give their pigs the ſmall ones, boiled, and they will fatten them to be fine bacon, but give ſome butter-milk, and a week or two before they are killed ſome offal corn. For fowls, boil them to a maſh, and mix with butter-milk, which fattens them exceedingly well. The price of potatoes on an average 20d. per cwt. the moſt productive ſorts are the white kidney, and the white Munſter. Lime-ſtone gravel the general manure of the country; they lay 3 or 400, one horſe-cart loads per acre; it will laſt from 15 to 20 years, and is of the greateſt benefit; it appears immediately: the expenſe uſually 1l. 11s. 6d. per acre. Spread it on the fallow, after the firſt plowing. They go much to Dublin for fullage of the ſtreets to lay on their hay grounds.

Good graſs-land letts at 40s. an acre; five miles round Dublin from 40s. to 10l. on an average about 3l. 8s. Mow moſt of it for hay;

hay; a good crop 20 load at 4 cwt. an acre round Dublin; through the county 12 load an acre. Many dairies kept for letting from 5 l. 15 s. to 6 l. 5 s. per cow; the dairyman finds labour, but has horſes enough kept him to draw the milk to Dublin.

On an average a cow will require, for her ſummer and winter food, an acre and an half, but not of the beſt graſs.——Of that an acre would do.——The breed the old Iriſh; the Engliſh cows do not give ſo much milk, from 4 to 6 lb. of butter a cow the produce per week: the butter-milk ſells from 4 s. to 6 s. per barrel. A good cow ſhould give 8 quarts a day, if leſs the cowman rejects her. The winter food hay. Very few ſwine kept, except by cottagers. Sheep they buy in June or July, and ſell them from September until March; buy in wethers three years old, at 20 s. and ſell them out at 1 l. 11 s. 6 d. but give them hay. Plough with oxen four in a plough; but in *goring*, or *croſs-plowing*, ſix, and do half an acre a day. To 100 acres arable there muſt be ſix bullocks and eight horſes.

Plough nine inches deep at *goring*; price of ploughing, ſowing, and harrowing, 16 s. to 20 s. an acre. Lay their fields in 4 foot lands. Keeping horſes, 9 l. a year each. No cutting of ſtraw into chaff among the common farmers: the plough oxen they work on ſtraw. They have more horſes than oxen; put

put them to work at three years old, keep them at it till nine, then fatten them. They break their ſtubbles in May or June, In hireing and ſtocking farms, they will, with 80 l. take as many acres, dividing it as follow, on 80 acres.

	£.	s.		£.	s.	d.
6 Horſes at	3	3	- -	18	18	0
4 Oxen	3	0	- -	12	0	0
4 Cows	2	10	- -	10	0	0
2 Pigs		18	- -	1	16	0
4 Iriſh cars	1	7	- -	5	8	0
2 Ploughs	-		- -	1	1	0
2 Harrows	-		- -	0	16	0
Harneſs	-		- -	4	4	0
Sundries	-		- -	5	0	0
Furniture	-		- -	5	0	0
Houſe-keeping the firſt year			-	6	0	0
1 Man 4 l. and 1 boy, 2 l. wages				6	0	0
1 Maid	-		- -	1	10	0
Seed 13 acres, wheat 20 s. Oats 13 acres - 16 s.			-	23	8	0
			£.	101	1	0

For

For part of which he will run in debt. Land ſells in general, through the county, at 22 years purchaſe. Till within three years it roſe much, from 1762 to 1772; ſince that it has rather fallen. Tythes none taken in kind, compounded by the acre. Wheat and barley 5s. 6d. Oats 2s. 9d. near Dublin 5s. or 6s. Moſt of the people drink tea, and conſume plenty of whiſky and tobacco. Leaſes 41 or 61 years; many on lives, and alſo renewable for ever.

Rent of cottages 26s. to 30s. with a potatoe garden. No emigrations. The religion in general catholic. Labour through the year 10d. a day, about Dublin 1s. A ditch of 6 feet wide 5 feet deep perpendicular, and 2½ at bottom earth all on one ſide 2s. 6d. a perch. Threſhing and cleaning wheat 9d. per barrel; barley 6d½. Oats 4d½.

PROVISIONS.

Bread 10lb. of 14 oz. for 12d.
Bacon 6d.
Butter-milk 1d½. a quart.
New milk 2d. a quart. Potatoes 1s. 6d. per cwt.
Candles 5d½. per lb. Soap 6d. Firing all ſtolen.

BUILD-

BUILDING.

Iriſh ſlate 15s. per 1000. Engliſh 20s.
Oak timber rather fallen in price in 10 years.
Elm 1s. 4d. Beech 1s. Soft wood 8d.
Firs at 60 years growth, 1 ton to 1½ of timber, and worth 2l. 2s. Walling 1s. a perch, for labour of 7 feet high and 18 inch thick. Building a cottage 3l. ditto a farm-houſe, and all offices for 80 acres, 20l.

Leaving Luttrel's town, I went to St. Wolſtans, which Lord Harcourt had been ſo obliging as to deſire I would make my quarters, from whence to view to the right or left.

June 25th, to Mr. Clements, at Killadoon, who has lately built an excellent houſe, and planted much about it, with the ſatisfaction of finding that all his trees thrive well; I remarked the beech and larch ſeemed to get beyond the reſt. He is alſo a good farmer. Cabbages he has repeatedly tried, and uſed them generally for fattening ſheep, and finds them much better for the purpoſe than turnips.

Potatoes he cultivates largely, not only for family uſe, but alſo for fattening ſwine; boils them, and they fat exceedingly well, without any mixture of meal, both porkers and for bacon, giving them oats for three weeks at laſt.

He

He has been very attentive to bring his farm into neat order reſpecting fences, throwing down and levelling old banks, making new ditches, double ones ſix feet wide and five deep, with a large bank between for planting, more effectually than ever I ſaw in England: alſo in hollow drains his wet lands.

Remarking in one of his fields under oats one part, about an acre incomparably beyond the reſt of the field, I enquired into the cauſe of it, and found it ſown with an Engliſh oat, no other difference in the circumſtances.

His ſyſtem of ſheep is to buy ewes, in September, at 14s. 6d. and to fatten both lamb and ewe, ſelling the firſt at 9s. and the latter at 18s. The wool is 4s. They lamb the beginning of March. Obſerving the legs being long, his man aſſured me that the longer the legs, the better the ſheep ſold in Smithfield. A ridiculous prepoſſeſſion! not peculiar to Ireland; Wiltſhire has it.

June 26th, breakfaſted with Colonel Marlay, at Cellbridge, found he had practiſed huſbandry with much ſucceſs, and given great attention to it from the peace of 1763, which put a period to a gallant ſcene of ſervice in Germany; walked through his grounds, which I found in general very well cultivated; his fences excellent, his ditches 5 by 6, and 7 by 6; the banks well made, and planted with quicks; the borders dug away covered with

with lime, till perfectly ſlacked, then mixed with dung, and carried into the fields: a practice which Mr. Marlay has found of very great benefit. He has cultivated the large Scotch cabbage for two or three years, which came to 16 or 17 lb. on an average, applied them to fattening oxen that had been fed on graſs; began to give them in November; has had 2½ acres: they fattened the beaſts very well, full as well as turnips, but did not think they anſwered the expenſe, as they require in order to have them of a great ſize an immenſe quantity of dung.

TURNIPS.

He has ſown every year ſince 1763, always had from 4 to 17 acres, has uſually drilled them in rows, the diſtances various; but thoſe which anſwered beſt, were double rows at 12 inches, with intervals of three feet, horſe hoed, hand hoed, and weeded them. Prepared for them by lime and dung; the crops fine, up to 21 lb. a turnip, but on an average about 8 lb. Generally fed beaſts with them that had the ſummer's graſs, but with both gave ſome hay, and were very fat in four months. Continued them in the ſame ground for ſix or ſeven years together, manuring for them every ſecond year. It is rather to be regretted that he did not every year change the land.

POTATOES.

Potatoes.

Plants them with the plough, drawing furrows five feet aſunder, filled with dung, the ſets on the dung, and then covered with the plough, and horſe-hoed them backwards and forwards, the crop 28 barrels per acre of very large ones.

Clover.

Mr. Marlay has introduced this plant ſo generally, that he ſows no corn without it. The profit exceedingly great, more than that of any other improvement.

Lime.

Uſed much, mixed with earth, and found great ſucceſs from it, even on lime-ſtone land. Burns at 7d. a barrel; always leaves it on the ditch-earth to ſlack, and then mixes it before dung is put to it.

Draining.

Has drained much in the hollow way, filling with ſtones, and found the benefit exceedingly great, can cart on the wetteſt lands at any time, two years have paid the expenſe.

Ploughing.

Inſtead of the common draught of the country, he uſes often only two oxen in a plough, for he has many ſorts of ploughs from Mr. Baker and from England.

Cows.

Cows.

From three Kerry cows, from the middle of May to the middle of September, he had 24 lb. of butter a week.

The Colonel favoured me with the following particulars of the common husbandry about Cellbridge. Farms generally 100 acres; the medium of the county from 20l. to 100l. Soil various; stoney loams, gravels and clays, and on lime-stone quarries. Rents about 1l. 10s on an average. Their course,

1, Fallow.
2. Wheat, sow a barrel and get 7.
3. Oats, sow two barrels and get 14.
4. Oats.

A little barley is cultivated.

They plough three or four times for wheat. Turnips were sown in fields 30 years ago, but left off on account of the poor stealing them. Great quantities of potatoes planted in the trenching way, the expense 3l. in labour only to put in if done by hire, and 40s. if for themselves. The cottagers pay the farmers 8l. an acre for the land ready dunged, and they require three car loads to every square perch.—This great manuring swallows up not only all the dung of the farm, but nine tenths of that of the kingdom. They begin to plant in March, and continue it to the end of May, most of them weed, the crop upon an

average about 100 barrels, at 5s. each. They are obliged to clear the land by the firſt of November, when the farmer ploughs and ſows wheat and gets fine crops. The apple potatoe is liked beſt, becauſe they laſt till the new ones come in.

In reſpect to manuring they uſe but little lime, but depend principally on lime-ſtone gravel, 300 car loads to an acre; if taken out of the ditch as on the ſpot, it coſts about 18 or 19s. an acre. It will laſt about five or ſix years good.

As to laying lands to graſs the tenants do it very often; but their only way is to let it cover itſelf with ſuch vegetables as may come, and upon ſome land it forms very good graſs.

But few cows kept. They apply their graſs chiefly to fattening cows; there is ſome good meadow on the river, and in grazing, two acres will fatten three cows, beſides ſome ſheep and winter food. Flocks riſe to 3 or 400—buy in wethers half fat, which turn into after-graſs till Chriſtmas, then to hay, and ſell in February and March; buy at 18 to 20, ſell at 30 to 35. They plough with both horſes and oxen, the draft four oxen or two oxen and two horſes. To a farm of 117 acres, ten horſes and two oxen.

They plough five inches deep, and do one half, or three fourths of an acre a day. Lay their

their lands in three feet ridges—No cutting ſtraw into chaff. The draft oxen have hay when worked. Hire of a boy, a horſe and car, 1s. 6d. a day; two cars and one man 1s. 6d. In hiring and ſtocking farms—for 50 acres

	£.	s.	d.
4 Horſes, at 31. 3s.	12	12	0
3 Cows, at 31. 3s.	9	9	0
2 Young cattle, at 16s.	1	12	0
2 Pigs 5s.	0	10	0
2 Cars 40s.	4	0	0
1 Plough	0	6	0
Harrows	0	5	0
No harneſs			
Sundries	1	0	0
Furniture	1	0	0
Houſekeeping 1s. 4d. a day for half a year	12	0	0
Harveſt, labouring, &c.	10	0	0
Seed, 10 acres, 10 bars. wheat 10 0 0			
10 Acres oats, 20 ditto 6 0 0			
5 Ditto bere, 5 ditto 3 0 0	19	0	0
	£. 71	14	0

PRODUCE.

3 Cows 5lb. butter a week, from 1ſt May to end of Sept. 100lb. at 8d.	3	6	8
2 Pigs	1	4	0
50 Barrels of wheat	50	0	0
10 Acres wheat ſtraw	10	0	0
10———oats, 100 barrels	30	0	0
5———bere, 13 ditto	48	15	0
	£. 143	5	8

EXPENSES.

Labour	£. 10	
Rent and ceſs	80	90 0 0

A farmer that has a plough, a harrow three cars, four horſes and ſix cows with 50l. in his pocket, will take a farm of 100 acres. Tythes for wheat 7s. for oats and bere 3s. for mowing ground 5s. Land ſells at 22 years purchaſe, has fallen ſince 1772 one or two years. County ceſs paid by tenant for roads 1s. an acre. Leaſes uſual three lives or 31 years, ſome renewable for ever. People rather increaſed. Rent of a cabbin and half an acre of land, 40s. All Catholics. Building a new cottage 10l. which with one half an acre lets at 40s. for a farm of 50 acres, 40 to 50l. Building a wall 10 feet high, 18 inches thick, and 21 foot long, 34s. with mortar daſhed 8s. leſs, ſlating a guinea a ſquare.

Walked through Laughlinſtown, the farm of the late Mr. John Whyn Baker, to whom the Dublin Society, with a liberality that does them great honour, gave for ſeveral years 300l. annually in order to make experiments.

I had had the pleaſure of correſponding with him ſeveral years, and melancholy it was to ſee the land of a man of ſo much ingenuity no longer his, and more ſo, to hear with all his exertions he was not able to anſwer the expectations raiſed of him. I found what

what I had ſuſpected from reading his experiments, that he wanted capital; without a ſufficient one it is impoſſible to farm well:—A man may have all the abilities in the world, write like a genius, talk like an angel, and realy underſtand the buſineſs in all its depths, but unleſs he has a proper capital, his farm will never be fit for exhibition;—and then, to condemn him for not being a good farmer in practice as well as theory, is juſt like abuſing the inhabitants of the Iriſh cabbins for not becoming excellent managers. No idea could be more uſeful, than that of encouraging ſuch a man as Mr. Baker, but a capital ſhould have been furniſhed him for bringing his farm into order, and when it was ſo, he ſhould have been directed not to try any experiments; becauſe thoſe trials were for the acquiſition of knowledge in diſputable points, and the ſociety wanted no ſuch diſquiſitions, but the exhibition of a farm, cultivated in a manner which experience has rendered indiſputable in England or elſewhere.

Viewed Lucan, the ſeat of Agmondiſham Veſey, Eſq; on the banks of the Liffey; the houſe is rebuilding, but the wood on the river, with walks through it, is exceeding beautiful. The character of the place is that of a ſequeſtered ſhade. Diſtant views are every where ſhut out, and the objects all correſpond perfectly with the impreſſion they were deſigned to raiſe: it is a walk on the banks

of the river, chiefly under a variety of fine wood, which rifes on varied flopes, in fome parts gentle, in others fteep; fpreading here and there into cool meadows, on the oppofite fhore, rich banks of wood or fhrubby ground. The walk is perfectly fequeftered, and has that melancholy gloom which fhould ever dwell in fuch a place. The river is of a character perfectly fuited to the reft of the fcenery, in fome places breaking over rocks; in others filent, under the thick fhade of fpreading wood. Leaving Lucan, the next place is Leixlip, a fine one, on the river, with a fall, which, in a wet feafon, is conſiderable. Then St. Wolftans, belonging to the dean of Derry, a beautiful villa, which is alfo on the river; the grounds gay and open, though not without the advantage of much wood, difpofed with judgment. A winding fhrubbery quits the river, and is made to lead through fome dreffed ground that is pretty and chearful.

Mr. Conolly's, at Caftle-town, to which all travellers refort, is the fineft houfe in Ireland, and not exceeded by many in England; it is a large handfome edifice, fituated in the middle of an extenfive lawn, which is quite furrounded with fine plantations difpofed to the beft advantage: to the north, thefe unite into very large woods, through which many winding walks lead, with the convenience of feveral ornamented feats, rooms, &c. On the

the other ſide of the houſe, upon the river, is a cottage, with a ſhrubbery, prettily laid out; the houſe commands an extenſive view, bounded by the Wicklow mountains. It conſiſts of ſeveral noble apartments. On the firſt floor is a beautiful gallery, 80 feet long, elegantly fitted up.

June 27th, left Lord Harcourt's, and having received an invitation from the Duke of Leinſter, paſſed through Mr. Conolly's grounds to his Grace's ſeat at Cartown, the park ranks among the fineſt in Ireland. It is a vaſt lawn, which waves over gentle hills, ſurrounded by plantations of great extent, and which break and divide in places, ſo as to give much variety. A large but gentle vale winds through the whole, in the bottom of which a ſmall ſtream has been enlarged into a fine river, which throws a chearfulneſs through moſt of the ſcenes: over it a handſome ſtone-bridge. There is a great variety on the banks of this vale; part of it conſiſts of mild and gentle ſlopes, part ſteep banks of thick wood; in another place they are formed into a large ſhrubbery, very elegantly laid out, and dreſſed in the higheſt order, with a cottage, the ſcenery about which is uncommonly pleaſing: and farther on, this vale takes a ſtronger character, having a rocky bank on one ſide, and ſteep ſlopes ſcattered irregularly, with wood on the other. On one of the moſt riſing grounds in the park is a tower, from the top.

top of which the whole ſcenery is beheld; the park ſpreads on every ſide in fine ſheets of lawn, kept in the higheſt order by 1100 ſheep, ſcattered over with rich plantations, and bounded by a large margin of wood, through which is a riding.

From this building his Grace has another ſort of view, not every where to be met with; he looks over a great part of 60,000 acres, which lie around him nearly contiguous; and Ireland is obliged to him for ſpending the revenue on the ſpot that produces it. At a ſmall diſtance from the park is a new town, Manooth, which the duke has built; it is regularly laid out, and conſiſts of good houſes. His Grace gives encouragement to ſettling in it, conſequently it increaſes, and he meditates ſeveral improvements.

Reached Kilcock.

June 28th, breakfaſted with Mr. Jones of Dolleſtown, who was ſo obliging as to anſwer my enquiries concerning the huſbandry of his neighbourhood. He informed me, that the town of Kilcock contained ſix great diſtilleries for making whiſky, and that all the waſh and grains were uſed in fattening either hogs or beaſts, generally the latter. About November they put them to it, and though quite lean, they will be completely fat by Eaſter: thoſe who are more attentive than

than common, give them alſo ſome bran or hay. Mr. Foſter of Branchale, at ſome diſtance from the town, has a more complete diſtillery, and fats more beaſts than any other perſon.

Farms here riſe from 20 to 100 acres, at 21s. an acre, except about the town, where they are higher: but they have fallen 5s. an acre in five or ſix years.

The courſe moſt common is,

1. Potatoes, which yield 60 barrels an acre.
2. Bere ſown in November, ¾ of a barrel per acre, the crop 13 or 14.
3. Oats, 1½ to two barrels ſown, the produce 13.
4. Oats.
5. Summer fallow.
6. Wheat, ſow ¾, get 7.
7. Oats.
8. Oats.

They plant ſome potatoes on lays without dung; but for this the land muſt be very good, or the lay old: it is not eſteemed ſo good a way as on ſtubble. The cottars give 5l. 5s. to 6l. an acre dunged for planting potatoes, and their expenſes are as follow;

Rent

Rent - - -	£.	5	15
Digging and putting in -		3	10
10 barrels of ſeed, at 5 s. per barrel,		2	10
Planting and ſpreading the dung -		0	10
Digging and gathering - -		3	10
	£.	15	15

The cutting the ſetts and weeding done in broken days.

Sixty barrels at 5 s.—15 l. Conſequently the prime coſt to them is 5 s. a barrel, or 1 s. 3 d. a buſhel, Engliſh, which is an evident proof that this is the worſt mode of planting in the world. They have not done taking them up till Chriſtmas.

Limeſtone gravel is the general manure of the country; it is found at two feet depth, and the worſe the ground is the better the gravel does upon it. They uſe it only for ploughed land. A good dreſſing of it coſts 50 s. an acre, and it laſts ſeven years. But few cattle or ſheep kept, for tillage has increaſed within twenty years very much, owing to the culture of potatoes, not to the bounty on the inland carriage of corn.

They plough entirely with horſes, uſe four in a plough, and do three-fourths of an acre a day. In laying their wheat and bere lands, they are very attentive to do it well; if the ſoil is dry on broad lands, if wet, on narrow; and

and after it is ſown and harrowed, they go once with the plough in every furrow, and ſhovel out all the looſe moulds: a practice which cannot be praiſed too much. They are ſo far from cutting ſtraw into chaff, that they throw away that of their crops. They are, upon the whole, in much better circumſtances than formerly, have fewer holidays, and more induſtry. Tythes are compounded. Meadow 3 s. Wheat 5 s. Bere 5 s. Oats 3 s. Leaſes are from 21 to 31 years. Rent of a cabbin and ſmall garden 40 s. Building one 5 l. A farm-houſe, and offices for 50 acres, 40 l. I remarked, all the way I came, great quantities of poultry in the cabbins and farms.

Mr. Jones, in an attentive practice of agriculture, has tried ſome experiments of conſequence. Potatoes he has cultivated for cattle; and had, at one time, twelve ſtore bullocks keeping upon them—they liked them much, and eat three barrels a day. They weighed 5 cwt. each; and had they been kept long enough on the potatoes, would have been fattened. For his horſes, he boils the potatoes, gives them, mixed with bran, and finds that they do very well on them, without oats.

Mr. Armſtrong, of King's-county, had 80 ſheep in the ſnow laſt winter, which got to his potatoes, and eat them freely, upon which he picked 40 of them, and put them to that food regularly; they fattened very quick, much

much ſooner than 40 others at hay, and yielded him a great price at Smithfield.

Mr. Jones has improved ſome poor rough land that produced nothing, firſt by hollow draining thoroughly, and then manuring it with limeſtone gravel, which brought up a great crop of white and red clover, and trefoile. He alſo ſpreads this manure on lays he intends breaking up; and obſerves that the uſe of it is very great, for, when dug out of ditches, you gain at once manure, drains and fences. He has ſeen ſome of it dropt on a bog in carting, and where-ever it falls, is ſure to bring up the white clover.

From hence took the road to Summerhill, the ſeat of the Right Hon. H. L. Rowley, the country is chearful and rich; and if the Iriſh cabbins continue like what I have hitherto ſeen, I ſhall not heſitate to pronounce their inhabitants as well off as moſt Engliſh Cottagers. They are built of mud walls 18 inches or 2 feet thick, and well thatched, which are far warmer than the thin clay walls in England. Here are few cottars without a cow, and ſome of them two. A belly full invariably of potatoes, and generally turf for fuel from a bog. It is true they have not always chimneys to their cabbins, the door ſerving for that and window too: if their eyes are not affected with the ſmoke, it may be an advantage in warmth. Every cottage ſwarms with poultry, and moſt of them have pigs.

pigs. It is to the polite attention of Mr. Rowley, I owe the following information. About Summerhill the ſoil is moſtly ſtrong ſtony land, on clay, but naturally fertile. He lets it at about 20s. an acre, which is the average rent of the whole county of Meath to the occupier; but if the tenures of middle men are included, it is not above 14s. This intermediate tenant, between landlord and occupier, is very common here. The farmers are very much improved in their circumſtances ſince about the year 1752. At a rack-rent, the land ſells at 21 years purchaſe; but according to circumſtances, to 26 and 27. Whenever a number of years purchaſe of land is mentioned in Ireland, it implies a neat rent, without any deductions whatever. A courſe of crops very common here is from the lay.

1. Wheat, the crop 6 barrels.
2. Wheat.
3. Oats, the crop 10 barrels.
4. Oats.
5. Clover.
6. Clover.

Potatoes are much planted, the beſt land yields 100 to 120 barrels per acre, but a middling produce 80, at 32 ſtone the barrel. The poor pay 6l. or 6l. 6s. an acre rent for graſs land to plant, and 3l. or 4l. for a ſecond crop. They are every where uſed for feeding hogs and poultry. Mr. Rowley has fattened worked oxen of five years old in eight weeks on them parboiled, with hay beſides,

ſides. Much marle is uſed here on the lighter lands, but for the heavy ſoils lime-ſtone gravel is preferred. In hiring farms, the lower tenants will take them of 50 acres, if they have a few cows and horſes, without a ſhilling in their pockets. Mr. Rowley keeps a very conſiderable domain in his hands; adjoining to it is a black turf bog of admirable uſe for firing. I viewed it attentively, and am clear, that all ſuch bogs as this with a fall from them for draining, might very eaſily be improved into excellent meadow. The ſurface is covered with heath about a foot high, and under that eight or nine feet deep of puffy ſtuff, which when burnt yields no aſhes; then the bog turf ten feet deep cuts like butter, and under that a marley lime-ſtone gravel. They have found at 14 feet deep evident marks of the plough in the ſoil at bottom, alſo remains of cabbins, cribs for cattle, mooſes horns, oaks, yews, and fir, being good red deal. In working for fuel, they dig out the black bog and throw the upper ſtratum in its place, through which open drains being kept, the turfs, as they are dug are ſpread on it for drying. In many ſpots I remarked the vernal graſs *(anthoxanthum odoratum)*, the holcus *(lanatus)*, narrow leaved plantain *(plantagolanceolata)*, docks *(rumex)*, white and red clover; and on the banks of the maſter drains a full crop of fern *(pteris aquilina)*. Upon cutting ſmall ſurface drains on the bog the heath *(erica)* doubles its growth. The expenſe of cutting drains in the bog ſix feet

feet wide at top, ſix deep, and one wide at bottom, is 8d. or 9d. a perch of 21 foot. The plantations and ornamented grounds at Summerhill are extenſive, and form a very fine environ, ſpreading over the hills, and having a noble appearance from the high lands above the bog. The houſe is large and handſome, with an elegant hall, a cube of 30 feet, and many very good and convenient apartments.

Went in the evening to Lord Mornington's at Dangan, who is making many improvements which he ſhewed me; his plantations are extenſive, and he has formed a large water, having five or ſix iſlands much varied, and promontories of high land ſhoot ſo far into it as to form almoſt diſtant lakes, the effect pleaſing. There are above 100 acres under water, and his Lordſhip has planned a conſiderable addition to it. Returned to Summerhill.

June 29th, left it. taking the road to Slaine, the country very pleaſant all the way; much of it on the banks of the Boyne, variegated with ſome woods, planted hedge-rows, and gentle hills: the cabbins continue much the ſame, the ſame plenty of poultry, pigs, and cows. The cattle in the road have their fore legs all tied together with ſtraw to keep them from breaking into the fields; even ſheep, and pigs, and goats are all in the ſame bondage. I had the pleaſure of meeting Colonel Burton

Burton at the caſtle, in whom I was ſo fortunate as to find, on repeated occaſions, the utmoſt aſſiduity to procure me every ſpecies of information, entering into the ſpirit of my deſign with the moſt liberal ideas. His partner in Slaine Mills, Mr. Jebb, gave me the following particulars of the common huſbandry, which, upon reading over to ſeveral intelligent farmers, they found very little occaſion to correct. Farms riſe from 100 to 300 acres, the ſoil, a ſtoney loam upon a rock, and lets on an average at 25 s. and the whole county throughout the ſame. The courſes of crops,

1. Fallow with lime, 120 barrels an acre, at 7 d. beſides carriage.
2. Wheat, ſow a barrel, and get 6 to 7, ſometimes 11.
3. Barley or oats, if barley, ſow 1¼. and get 13.
4. Oats, ſow two barrels, the crop 16. Alſo,

1. Fallow, 2. wheat, 3. barley, 4. oats, 5. clover, for

Two Years 6. barley.

Another, 1. fallow, 2 wheat, 3. ſpring corn, 4. ſpring corn, 5. fallow, 6. wheat, 7. barley, and red or white clover or trefoile and hay ſeeds. Another, 1 fallow, 2. wheat, 3. clover, 2 years, 4. barley, 5. oats. A common practice is, for the farmers to hire any kind of rough waſte land, at three guineas, or three pound an acre for three crops, engaging to lime it if the lime is found them; 120 barrels per acre, which comes to 3 l. 10 s. from 9 l. 9 s.

9 s. leaves ſix for three years. They cultivate it in the common courſe of 1. fallow, 2. wheat, 3. barley, and 4. oats. Turnips not generally come in, but farmer Macguire has 20 acres to 40 every year, but does not hoe them, he feeds ſheep on the land and then ſows barley and clover. Clover would be more general, was it not for the expenſe of picking the ſtones for mowing, which coſts 10s. or 12s. an acre. Sometimes mow it once, and feed afterwards; the crops exceedingly great. A few tares ſown for the horſes. On the banks of the Nanny water, many white peaſe ſown, inſtead of a fallow, and good crops, wheat ſown after them. They alſo ſow beans about Kilbrue. Every farmer has a little flax, from a rood to an acre, and all the cottagers a ſpot, if they have any land, they go through the whole proceſs themſelves, and ſpin and weave it. From hence to Drogheda, there is a conſiderable manufacture of coarſe cloth, which is exported to Liverpool, about 1 s. a yard. At Navan there is a fabrick of ſacking for home conſumption; the weavers earn 1 s. a day at theſe works.

Potatoes are a great article of culture; the cottagers take land of the farmers, giving them 4l. 10s. an acre, dunged. All in the trenching way, the ridge ſix feet, the furrow two and a half; always weed them, the beſt ſeaſon for planting the middle of April. The crop 64 barrels on an average, and the price 3s. 6d. a barrel. They have got much into the apple potatoe.

	£.	s.	d.
Rent - - -	4	11	0
Spreading dung -	0	2	0
Seven barrels of ſeed 3s. 6d. -	1	4	6
Cutting and laying - -	0	6	6
Trenching and earthing up -	4	0	0
Taking up picking 1d ½. a barrel, 64	0	8	0
	10	12	0

From whence it appears, that the prime coſt of the potatoes is 4s. a barrel. Wheat is ſown after them, and ſometimes barley; the wheat is generally a bad crop and bad grain, but the barley good. For fat hogs they boil them, and at laſt mix ſome bran or oats; a hog of 2 cwt. will fatten in two months, on ſix barrels and one barrel of oats. Much poultry is alſo reared and fed in all the cabbins by means of potatoes.

Waſte lands have been brought in and cultivated at Grange Geath, the ſoil ſtony and over-run with heath (*erica valgaris*) and whins, (*ulex europœus*) let before the improvement at 4s. but lets now at 20s. They ploughed up the ſurface and ſpontaneous growth, ſummer fallowed and lined at 150 barrels an acre, ſowed wheat, and purſued the courſe above mentioned, the crops of oats exceedingly great, 20 barrels an acre; of this land there were 2500 acres. The great manure of the country is lime, which is always laid on fallow; they

they find the advantage of it ſo clearly as to be ſeen in the effect to an inch: but when land is got much out of heart, then the lime will not do; and they lay it down to clover for ſeveral years till there is ſomething of a turf, after which it will anſwer well. Hollow draining is generally uſed, even by the common farmers, who have found by experience that their lime will do no good till the land is drained. The fences about new incloſed pieces, and thoſe made in general by gentlemen, are ditches ſix feet deep, ſeven feet wide, and 14 inches at bottom, with two rows of quick in the bank, furz ſown on the top, or a dead hedge of bruſh. Good graſs land for meadow lets for 3 or 4l. an acre; mow it all and get three ton of hay an acre or fifteen Iriſh load. Many dairies of cows, up to 50 and 60, kept here for butter. Mr. Kelly, near the obeliſk, Drogheda, has 200 cows let at 5l. The breed is half Engliſh and half Iriſh, worth 5 to 7l. each; the farmers let theirs to dairy-men, who are common labourers, at 4l. a piece, but if they won't give five to ſeven quarts at a meal they may be rejected; a good one will give ten quarts of milk per meal, the produce about 5l. conſequently there is 20s. a head profit. As butter-milk is all the food of the people, the number of ſwine kept is very ſmall: it is carried to Drogheda, and ſold at ſix quarts a penny. The cows are fed in winter on hay alone; all are kept abroad in the day, but houſed at night. They rear almoſt all the calves, weaning

ing them at ſix weeks or two months old: at a fortnight they ſell at 3 or 4s. Some, but not dairy-men, give them in rearing hay-tea. They fatten many cows, having much graſs; an acre to a cow. Swine fatten from one to two cwt. Many are kept upon potatoes alone, and fattened intirely upon that root, which is thought to be a very profitable uſe; the potatoe fed pork much firmer than that on pollard. There is a great demand this year, many ſhip loads alive being bought up for England; and the price good, encourages the breed incredibly. Many ſheep are kept, bought in every year in autumn, moſtly ewes, but ſome wethers, at 12 to 15s. Sell the lambs fat in May or June at 10s. cut four or five pound of wool, worth 5s. and fat the ewe to 19 or 20s. profit 1l. 1s. a head. Buy wethers at 20 to 25s. ſell at 30 to 42s. with a fleece of ſeven pound; in winter they have hay, and ſome ſheaf oats. No rot here. Plough all with horſes, ſix to a plough, and do an acre a day, working often from ſix in the morning to eight at night, and ſtirring eight or nine inches deep. They keep 10 or 12 horſes to 100 acres in tillage, and breed them all themſelves. The price of ploughing 8s. an acre. The whole preparation of a fallow worth 25s. an acre; and for barley 12s. The form of lands narrow ridges three or four feet wide; the year's expenſe to a farmer 5l. each horſe; very ſeldom give them any oats. They cut no ſtraw into chaff; and as all their corn is winnowed in the road, the chaff of it

is

is loſt. They never break their ſtubbles till about Chriſtmas; the plough generally uſed, is an imperfect ſwing one. In hiring and ſtocking farms, they will take 100 acres or more with ſcarce any money; but then they muſt have to the value of

		£.	s.	d.
8 Horſes at 5l.	-	40	0	0
4 Cows 5l.	-	20	0	0
2 Sows 10s.	-	1	0	0
6 Cars 3l.	- -	18	0	0
2 Ploughs 12s	- -	1	4	0
2 Harrows	- -	1	13	0
No rollers uſed				
Harneſs 10s. a horſe	-	3	0	0
Sundries -	-	10	0	0
Houſhold furniture	-	5	0	0
1 Sack of oat-meal	-	1	0	0
Labour ſupplied by letting land to others for potatoes; no ſeed, as he pays the preceding tenant the eighth ſheaf of the winter corn, and the fourth of the ſpring, in lieu of the ſeed and ſowing.				
		100	17	0

A very intelligent labourer, ſent for by Mr. Burton, gave me the following account for 40 acres, 10 of them graſs

	£.	s.	d.
4 Horſes - -	18	4	0
4 Cows - -	20	0	0
	38	4	0

Brought

		£.	s.	d.
	Brought over £.	38	4	0
10	Sheep - - -	7	0	0
1	Sow - -	0	15	0
1	Plough and harneſs - -	2	5	6
2	Harrows - -	1	2	9
10	Sacks - - -	1	0	0
	Winnowing ſheet -	0	10	0
	Furniture - -	10	0	0
15	Acres oats ſeed, to barrels and a half an acre, -	18	10	0
6	Acres barley one and a half, 9 barrels 12s. -	5	8	0
	Labourers - -	20	16	0
2	Boys and a maid ſervant -	3	8	3
	Proviſion 8 cwt. of oatmeal	3	4	0
4	Barrels meſlin at 16s. -	3	4	0
	Wear and tear -	2	5	6
4	Cars - -	9	2	0
	Poultry - -	0	13	3
		127	8	3

With this expenditure they fare no better than common labourers, and do not improve in their circumſtances. Land ſells at rack rent 22 and 23 years purchaſe, as well now as in 1768; the bankruptcies in 1772 did not affect the purchaſe of land. County ceſs 8d. to 1s. an acre; tythes for wheat 7s. barley 5s. oats 3 to 4s. mowing ground 3s. 6d. nothing for land ſed, and no ſmall tythes; no tea drank among the cottagers. Leaſes in general 31 years to catholics; to proteſtants three lives or 31 years.

31 years. Rent of cabbins 40s. with a potatoe garden; if a cow is kept 40s. more. No emigrations. The catholic religion general among the lower claſſes.

Labour.

Ditching 6 feet by 5, 20d. a perch
4 by 5, 1s. 2d.
6 by 7, 2s. 6d.
Threſhing wheat 1s. a barrel
Barley 8d.
Oats 5d.
No ſervants hired at all.
Women a day in harveſt 8d.

Riſe in the price of labour in ten years, from 5d. and 7d. to 8d. and 10d. but they work harder and better.

Provisions.

Bacon 5d. bread 1d. potatoes 2 ½d. a ſtone, new milk 1d. a quart, ducks 3d. candles 6 ½d. ſoap 6 ½d. firing of the poor furz and coals to a trifling amount. The farmers burn their ſtraw, *for which they deſerve to be hanged.*

Building.

Slate 12s. per 1000.
Elm 2l. 10s. to 3l. a ton.
Fir 3l.
Dry walls daſhed 2s.
Building a cabin 5l.
Ditto a farm houſe and offices for 100 acres 50l.

Hire

Hire of four cars, one man and a boy 4s. a day; 23 miles from Dublin it takes the whole week to go twice. The price to go there 10s. a week, 4s. of it expenſes on the road. The load ſix cwt. each car. But Mr. Jebb has ſent 18 cwt. to Dublin with one horſe, and not an extraordinary one, 15 or 16 cwt. often.

In the improvements making about the caſtle, it was neceſſary to move a large hill of lime ſtone, and as the readieſt way, Colonel Burton is burning it to lime. The kiln, like moſt I have ſeen in Ireland, is a very good one. It is in the ſhape of an egg, 19 feet deep, and 9 diameter in the ſwell; when new it burnt 400 barrels in a week, each three buſhels; but as the lining is worn, it is now from 350 to 400. A ton of culm, which coſts at Drogheda 13s. and 2s. freight from thence, burns 50 barrels of lime. Quarrying and burning the ſtone is 1 ½d. a barrel, expenſes in all 5 ½d. and it ſells at the kiln for 7d. The ſtone is laid in layers eight or nine inches thick, and is always kept ſupplying at top and emptying at bottom. The kiln coſt 35l. building, and it employs three hands.

Lord Conyngham's ſeat, Slaine Caſtle, on the Boyne, is one of the moſt beautiful places I have ſeen; the grounds are very bold and various, riſing around the caſtle in noble hills or beautiful inequalities of ſurface, with an outline of flouriſhing plantations. Under the caſtle flows the Boyne, in a reach broken

by

by iſlands, with a very fine ſhore of rock on one ſide, and wood on the other. Through the lower plantations are ridings, which look upon ſeveral beautiful ſcenes, formed by the river, and take in the diſtant country, exhibiting the nobleſt views of waving Cultinald Hills, with the caſtle finely ſituated in the midſt of the planted domain, through which the Boyne winds its beautiful courſe.

Under Mr. Lambert's houſe, on the ſame river, is a moſt romantic and beautiful ſpot; rocks on one ſide, riſing in peculiar forms very boldly; the other ſteep wood, the river bending ſhort between them like a land-locked baſon.

Lord Conyngham's keeping up Slaine Caſtle, and ſpending great ſums, though he rarely reſides there, is an inſtance of magnificence not often met with; while it is ſo common for abſentees to drain the kingdom of every ſhilling they can, ſo contrary a conduct ought to be held in the eſtimation which it juſtly deſerves.

June 30th, rode out to view the country and ſome improvements in the neighbourhood: the principal of which are thoſe of lord chief baron Foſter, which I ſaw from Glaſton-Hill, in the road from Slaine to Dundalk. Adjoining to it is an extenſive improvement of Mr. Forteſcue's; ten years ago the land was let at 3s. 6d. now it is a guinea, which

which great work was done by the tenants, and lime and fallon the means purſued. Theſe and other improvements, with the general increaſe of proſperity, has had ſuch an effect in employing the people, that Colonel Burton aſſured me, that 20 years ago, if he gave notice at the maſs houſes, that he wanted labourers, in two days he could have 2 or 300; now it is not ſo eaſy to get 20, from the quantity of regular employment being ſo much increaſed. I obſerved weavers looms in moſt of the cabbins, went into one, and the man informed me that he could weave a web 65 or 66 yards long, and 26 inches wide, at 8d. a yard price, in a week. 34 to 36 lb. of yarn makes it, which coſts 15d. per lb. he and his journeyman could earn 7 or 8s. a week by it. He paid 4l. 4s. for the grazing of a cow, a rood of potatoe garden, and the cabbin. They were burning ſtraw, which I forgot to remark I have found very common where there is no turf: a moſt pernicious cuſtom, it is in fact what I have often heard literally reported, that they burn their dunghills in Ireland.

Paſſed through ſeveral farms much improved, and found great attention given to fences, the ditches very large, and the banks well planted.

Lord Boyne's eſtate appears to be very rich, and the tenants beyond the common run.

The

The country is well wooded, and has an appearance of ſome of the beſt parts of England.

Walked into Mr. Maurice's fields; he is a conſiderable farmer, buys his fattening cows in May from 3l. to 6l. 6s. ſells fat from Auguſt to Chriſtmas, with 30s. profit: he has laid down a meadow to graſs with ſo much care that the expenſe was 10l. an acre. In one of his fields he ſowed red clover, with the third crop of corn, it failed, but an amazing ſheet of white clover came, which I ſaw, and was indeed ſurpriſed at ſuch a proof of the excellency of the ſoil, even under ſuch exceeding bad management; but not a human being that I have met with has any notion of ſowing clover with the firſt crop.

Returning to Slaine, dined with Mr. Jebb, and viewed the mill, which is a very large edifice, excellently built; it was begun in 1763, and finiſhed in 1766. The water from the Boyne is conducted to it by a wear of 650 feet long, 24 feet baſe, and 8 feet high, of ſolid maſonry: the water let into it by very complete flood gates.

The canal is 800 feet long, all faced with ſtone, and 64 feet wide; on one ſide is a wharf completely formed and walled againſt the river, whereon are offices of ſeveral kinds, and a dry dock for building lighters. The mill is 138 feet long, the breadth 54, and the height

height to the cornice 42, being a very large and handſome edifice, ſuch as no mill I have ſeen in England can be compared with. The corn upon being unloaded, is hoiſted through doors in the floors to the upper ſtory of the building, by a very ſimple contrivance, being worked by the water-wheel, and diſcharged into ſpacious granaries which hold 5000 barrels. From thence it is conveyed, during ſeven months in the year, to the kiln for drying, the mill containing two, which will dry 80 barrels in 24 hours. From the kiln it is hoiſted again to the upper ſtory, from thence to a fanning machine for re-dreſſing, to get out dirt, ſoil, &c. And from thence, by a ſmall ſifting machine, into the hoppers, to be ground, and is again hoiſted into the bolting mills, to be dreſſed into flour, different ſorts of pollard and bran. In all which progreſs, the machinery is contrived to do the buſineſs with the leaſt labour poſſible: it will grind with great eaſe 120 barrels, of 20 ſtone each, every day. Beginning in 1763, for a few years, about 13000 barrels *per ann.* were ground, of late years up to 17000 barrels. It may be obſerved, that this mill is very different from the Engliſh ones, they not being under the neceſſity of kiln drying or dreſſing. The expenſe, per barrel, of the drying in coals and labour is 3d. and the waſte is 1-20th in the weight: but the contrivance reduces the expenſe of dreſſing to a trifle. The whole charge of manufacturing the wheat into flour in mere labour, is 9d. a barrel, and

and the 3d. drying makes 1s. The barrel weighs 20 ſtone, 14 lb. to the ſtone, of which

Flour -	14 ſt. 8 lb.	
Bran Pollard	4 ſt.	
Dirt, waſte, grinding and dreſſing -	1 ſt. 6 lb.	on average of the year
	20 ſt.	

The waſte, in re-dreſſing the corn, (which is what the farmers ought to do) is about 3 lb. a barrel.

The pollard Mr. Jebb tried, for ſix years, in giving to pigs. Bought in *ſtores* in September, at 7s. to 20s. each, and put them to pollard given wet, about the thickneſs of gruel; it could have been ſold for 2s. a barrel of 6 ſtone, and in feeding, it did not produce more than 10d. a barrel; pork from 18s. to 20s. per cwt. Thinks it would not more than pay the 2s. a barrel if pork was 40s. per cwt. Tried alſo breeding ſows, bought Berkſhire ſows fed upon the pollard, but it did not anſwer better than the other method. The pork fed upon it was ſoft, and not near ſo good as potatoe fed. Mr. Jebb thinks, however, that if he had had plenty of ſtraw litter, as the ſtone-yard foundered them and clover for the ſummer food, that it would have paid the 2s. a barrel, but not more, the dung

dung being then the profit. The ſows did exceedingly well, and the pigs alſo in rearing.

The corn is brought to the mill from all the country round to the diſtance of 10 miles. The farmers ſend it in, and leave the price to be fixed. The raiſing the mill and offices, complete, coſt 20,000 l. and has eſtabliſhed, in a fine corn country, a conſtant market; and has preſerved the tillage of the neighbourhood, which would have declined from the premium on diſtant carriage.

The flour is ſent to Dublin, and the manufacturing country to the North about Newry, &c.

It employs conſtantly from 10 to 12 hands; the common ones, 6s. 6d. a week.

They ſow much earlier, and the corn is drier of late years than at firſt.

The carriage of all the flour that is not ſent by the navigation is by one horſe cars, which carry 6 cwt. of flour twice a week to Dublin.

The pariſh of Monknewton, in the county of Meath, lying between Drogheda and Slaine, nearly midway, formerly belonging to the rich abbey of Meliſont (whoſe beautiful gothic ruins are in the neighbourhood), conſiſts of very fine corn land, and moſtly belongs to John

John Baker Holroyd, Eſq; of Sheffield place, in the county of Suſſex: a gentleman, who having favoured me before with excellent intelligence in that country, took pleaſure in repeating it on occaſion of my Iriſh tour.

Towards Mattock bridge, the ſoil is a light rich loam, but the North Weſtern part is a ſtrong fertile clay. The whole eſtate had been let out to two or three conſiderable people for 61 years, and they under-let in the uſual ſtyle of the country. The leaſes expired in 1762, when Mr. H. viſited the eſtate, and found it as ill uſed as it poſſibly could be. However, great rents were offered. He declined the propoſals of ſeveral conſiderable men, to take the whole to under-let at rack rents as before, knowing that the ſame wretched huſbandry and poverty muſt continue, if he did, although it would ſecure his rents moſt effectually. He was very well ſatisfied with the rents offered by perſons who would reſide on the eſtate, (dividing with them the profits of the middle man), and voluntarily engaged to pay for the maſonry and principal timber of farm-houſes, barns, ſtables, &c. He made large ditches, planting them with quick, round each farm. He allowed half the expenſe of inner fences. He provided an excellent lime-ſtone quarry in the neighbourhood, beſides lime kilns on different farms. He built about the centre of the eſtate a very large double kiln, calculated to burn 1000 barrels per week. He allows 30s. for every acre

acre on which 100 barrels of unſlacked lime ſhall be laid, within a certain number of years, and on condition that the land hath a winter and ſummer fallow at the ſame time. In ſome inſtances he allows 40s. per acre, which is nearly the whole expenſe of liming; and in ſome inſtances, when 100l. is laid out on an houſe, he allows 50 or 60l. but as yet, no great advantage is taken of his encouragement to build. He endeavoured to prevent the ſcattered ſtyle of building; to have the barns, ſtables, &c. built round a farm yard, and that the houſe ſhould have a ſtory or floor above. Some objected, that a floor raiſed an houſe too high, and expoſed it too much: the eſtate is rather low as to ſituation, and ſheltered by hills on every ſide, but I underſtand ſome conſiderable houſes are to be built next year. The common farmers, however, prefer living on the ground, ſurrounded by mud walls, have no idea of the chearfulneſs of large windows, but let in barely light enough to do their buſineſs through apertures not much better than loop holes, neither has the encouragement to lime been taken advantage of in the degree it might be expected. Mr. H. is an hearty well-wiſher to Ireland, and ready to embrace any ſcheme of improvement for its advantage. He wiſhed to make ſome return to the country for ſpending the income of the eſtate out of it. He was ready to allow almoſt the whole of every expenſe that could be laid on the lands, knowing the poverty

poverty of the common Iriſh reſiding tenantry, and their characters to be ſuch, that they could not improve them as they ſhould be; yet I underſtand they are not much better ſatisfied than other tenants: and the rent ſeems high. The farms were moſtly let at a time when the ſpirit of taking land was greater than at preſent, but it is far from an high rent for land ſo circumſtanced and ſituated, built and improved at the expenſe of the landlord. There is much in the neighbourhood, eſpecially towards Drogheda, let at two guineas, and three pounds and upwards, per acre. He is a great friend to agriculture, has conſidered the ſubject much, and was very anxious to introduce ſomething like the beſt Engliſh huſbandry on his Iriſh eſtate, but that is ſtill at a great diſtance. He endeavoured to break through the barbarous cuſtom of having the whole farm laid waſte at the end of a leaſe, and every inch ploughed up, but could not carry his point further, than by giving great preſent advantages to the tenants, to induce them to agree, that the third part of the farms ſhould not be ploughed the laſt four or five years of the leaſe. The ſoil is ſo good, that if uſed ever ſo ill in that time, it will recover, and there will be a very good ſward. According to the common method of leaſing lands in many parts of Ireland, the country is nearly waſte and unprofitable, to the great prejudice of the public, during ſeven or eight years in

every 31 years, the uſual leaſe. For the tenant, not reſtrained by proper clauſes, nor obliged to any particular management, or to manure, ploughs up every thing, and for ſome time before the expiration of his term, purſues the moſt ruinous ſyſtem for the land, diſpoſed even to loſe ſome advantage himſelf, rather than his ſucceſſor ſhould have any benefit; conſequently, the three or four laſt years the crops hardly pay expenſes, and three or four years more are loſt before it can be brought into any condition. Good and ſtraight roads are made through and acroſs the eſtate, and bridges built where neceſſary. Such a diſpoſition in the landlord to improve, muſt do much for the country.

Notwithſtanding the attention that has been paid to the eſtate, the young white thorn hedges, (of which a great quantity had been planted, and which grew moſt luxuriantly) ſerve as ſpring food for ſheep and other cattle. The eſtate is now divided into farms, from 70 to 150 acres, and let in general for 31 years, at 40s. and 35s. per acre, ſome part at 30s. and a ſmall part at 26s. The lands are tythe-free, and there are no taxes of any kind paid by the tenants, except aſſeſſments for making and repairing the roads of the barony, which ſome years amounted to 10d. per acre, and is laid on by the grand jury at the aſſizes.

July

July 1ſt, left Slaine, taking the road towards Kells. Called at Gibbs town, where Mr. Gerard has one of the moſt conſiderable farms in the country. He very kindly ſhewed me it, and explained the management. His bullocks he buys in October at 10l. each, and ſells them in ſummer with 4l. profit: the cows in May, at 5l. 10s. and ſells them before winter from 30s. to 40s. profit. He mows 100 acres of hay for the ſheep and bullocks, and keeps good after-graſs beſides. The bullocks in winter have nothing but hay and graſs, and are always in the fields, there being no ſuch thing in this country as foddering yards for winter feeding. Two bullocks require three acres. The fields being generally large, a proportion of ſtock is thrown to each, which are left to fat; but if any do not ſeem to thrive well, they are drawn from them and put into better food.

The ſheep Mr. Gerard buys in October, three year old wethers, at 25s. he begins to ſell in April, and by Auguſt they are generally gone at about 35s. on an average. Fatting, in this manner, he thinks more advantageous than ewes and lambs. The winter ſheep have hay in bad weather.

The beſt cattle come from Galway, Mayo, and Roſcommon. Mr. Gerard thinks the croſs of the Engliſh breeds in Ireland has done good, except in the hides, which are much

thinner from them. A good hide is worth 3l. or 4l. but in common from 30s. to 40s.

The ſoil of this neighbourhood is, much of it, a dry ſtoney loam, which wants no draining; and whenever red clover is ſown and left, the white comes in perfect ſheets, but the bottoms are ſtrong land, wet and bad. All the dry lands would do perfectly well for turnips; Mr. Gerard tried them, and got fine crops: but the poor ſtole them in car loads, which made him leave off the practice.

Under the boggy bottoms there is a very fine white marle, of a ſort I have not ſeen in England; it is under four feet of black bog, and lies in a ſtratum, 14 feet thick, on blue gravel; it is always found under the black, not the red bog; it cuts with turf ſpades, quite like white butter, but in the air falls into a ſandy powder to appearance: it is uncommonly light in the hand, and has a very great effervescence with acids, as I tried. Mr. G. has marled 109 acres, and found the benefit immenſe. Lays 2 or 300 barrels an acre, and always on tillage.

He has made many covered drains with ſtones, the effect of which is great; and he has his fields fenced in the moſt perfect manner by deep ditches, high banks, and well planted hedges.

One

One third of the county of Meath, he thinks, is let to ſub-tenants; a farm of 1100 acres near him is ſo, and does not produce a tythe of what it ought to do. For ſtocking, &c. a grazing farm of 1000 acres, 2000l. does; 3000l. would do it well.

Corn-acres are common here, which is to let the land for 3l. 15s. to 4l. an acre to the poor for three or four crops; who generally ſow oats, but ſometimes wheat.

Reached Lord Bective's in the evening, through a very fine country, particularly that part of it from which is a proſpect of his extenſive woods. No perſon could with more readineſs give me every ſort of information than his lordſhip.

The improvements at Headfort muſt be aſtoniſhing to thoſe who knew the place ſeventeen years ago; for then there were neither building, walling, nor plantations: at preſent almoſt every thing is created neceſſary to form a conſiderable reſidence. The houſe and offices are intirely new built; it is a large plain ſtone edifice. The body of the houſe 145 feet long, and the wings each 180. The hall is 31½ by 24, and 17 high. The ſaloon is of the ſame dimenſions, on the left of which is a dining room, 48 by 24, and 24 high: on the right, a drawing room 24 ſquare by 17 high, and, within that, Lady Bective's dreſſing-room,

23 by 18. There are alſo, on this floor, a breakfaſt-room, 23 by 18, and a room for Lord B. of the ſame ſize. The firſt floor conſiſts of ſix apartments, one 31½ by 24, two 24 ſquare; a fourth 23 by 19½; a fifth 20 by 18; a ſixth 23 by 19, all 15 high, beſides two dreſſing rooms. From the thickneſs of the walls, I ſuppoſe it is the cuſtom to build very ſubſtantially here. The grounds fall agreeably in front of the houſe, to a winding narrow vale, which is filled with wood, where alſo is a river, which Lord Bective intends to enlarge; and, on the other ſide, the lawn ſpreads over a large extent, and is every where bounded by very fine plantations. To the right, the town of Kells is pictureſquely ſituated, among groups of trees, with a fine waving country and diſtant mountains; to the left, a rich tract of cultivation. The plantations are very numerous, more thriving I have no where ſeen; the larch, ſpruce, and beech, in particular, running beyond the reſt, but the bark of all is clear, and there cannot be a better ſign of a tree's health and vigour.

His Lordſhip tranſplants oaks 20 feet high without any danger, and they appear to thrive perfectly well, but he takes a large ball of earth up with the roots. He confirmed what had been mentioned to me before, that the way to make our own firs equal to foreign, was to cut them in June, and directly to lay them in water for three or four months. This was

was done by his father 35 years ago, and the buildings raiſed of them are now fully equal to thoſe built of Norway fir.

Beſides theſe numerous plantations, conſiderable manſion, and an incredible quantity of walling, his lordſhip has walled in 26 acres for a garden and nurſery, and built ſix or ſeven very large pineries, 90 feet long each. He has built alſo a farm-yard 280 feet ſquare, totally ſurrounded with offices of various kinds.

His Lordſhip's idea is not that of farming, but improving the lands about the houſe for beauty; for if let, they would be deſtroyed and ploughed, and alſo for preſerving the plantations. Other lands he keeps only to bring them into order for re-letting. He applies his graſs beſides horſes, to fattening cows, which he buys in in May, from 3l. 15s. to 4l. 10s. and in five or ſix months ſells them, with 35s. to 40s. profit. His mules are 16 or 17 hands high, and he finds them of incomparable uſe: they are in their prime at 20 years old, and good even at 35; he has had them 16 years, and in that time, with the work they have done, would have worn out three ſets of horſes, beſides being kept upon leſs food. Of hay he gets 17 or 18 load an acre of 4 cwt.

In the breed of his cattle, Lord Bective is very attentive: he ſent into Craven for a prime

prime bull, and got one, which coſt him 36 guineas at a year old, and he is indeed a very fine beaſt. This is the breed, which from much experience he prefers, as well for milking as for fattening. The Holderneſs he has tried, having a very fine bull, but is determined to have nothing more to do with them: the fleſh is black and coarſe; and though they give more milk than the others, yet it will not make a quantity of butter proportioned. The common cow of the country is as good as any for mere milking.

All Lord Bective's gates are iron, which coſt him 5l. 5s. and as wooden ones come to 3l. 3s. he finds them the greateſt improvement, ſaving the expenſe very ſoon. In his tillage he purſues the practice of the country, which is, 1. Fallow. 2. Wheat. 3. Oats. 4. Oats, but does not take the laſt crop of oats. He limes 160 barrels an acre on his fallow, but the common quantity only 80, by means of which, and better huſbandry, he has 10 barrels an acre of wheat, and 20 of oats; while the common crops are 7 of the one, and 12 of the other. Marle he has found an excellent manure for dry ſoils.

The general rent of the neighbourhood 20s. Of the whole county 18 s. 6 d. Land ſells at 21 years purchaſe at rack rent.

The cottars plant great quantities of potatoes, giving for rent 4l. 10s. the crop from 70 to 100 barrels. This culture has increaſed 20 fold

fold within 20 years. All the hogs in the country are fattened on them half boiled.

In July, Auguſt, and September, they have great numbers of Connaught labourers; they are called *ſpalpeens: ſpal*, in Iriſh, is a ſcythe, and *peen* a penny; that is, a mower for a penny a day, but that is 80 years ago.

Lord Bective's father was one of the greateſt improvers I have heard of. He bought 10,000 acres of bog and rough land in the county of Cavan, much at the rent of only 20d. an acre: he drained and improved the bog, though a red one, divided it, and brought it to be ſuch good land, that it is now 15s. an acre; part of it was dry rocky land, which he divided by walls.

July 3d, took my leave of Lord Bective, and went to Drueſtown, the ſeat of Barry Barry, Eſq; but as I was not fortunate enough to find him at home, I could only obſerve in general, that he had a large lawn very well laid down to graſs, and had made a very pretty lake with a ſhrubbery on the banks of it. About this neighbourhood all the good land is applied to grazing, and lets from 25 to 35s. an acre, the reſt 20s. But towards Fore I paſſed by much that was greatly inferior, for when laid down, (that is left to itſelf) no white clover, or very little came, and it ſeemed quite unincloſed; yet this I found was at 14 or 15s. I obſerved here that the cottars were not ſo well cloathed as hitherto.

Reached

Reached Packenham-hall, pleaſantly ſituated, with much old wood about it, where Lord Longford received me with the moſt friendly attention, and gave me very valuable inſormation. For the following particulars of the neighbouring huſbandry I am obliged to him. Farms riſe from 20 to 100l. a year, in general 60 or 80l. but few larger. The ſoil heavy, loam eight or nine inches deep upon from 12 to 18 inches of yellow *till*, under which, lime-ſtone gravel 10 feet deep on rock, alſo dry ſound gravel, lets from 15 to 20s. Average rent of the county of Weſtmeath, excluſive of waſte, 9s. including it 7s. The courſes of crops moſt common:

1. Potatoes	1. Potatoes
2. Bere	2. Flax
3. Oats	3. Oats
4. Oats	4. Oats
5. Oats	5. Oats

and oats longer if the land will bear it, even till they do not get three barrels an acre, and then leave it to cover itſelf. Among the better farmers;

1. Fallow manured with lime-ſtone gravel.
2. Wheat or bere.
3. Oats.
4. Oats.

They ſow one barrel of wheat, and get ſeven per acre; ſow one and a half of bere, and get 15 or 16; of oats one and a half, the crop 10 or 11 at firſt, and decreaſes every year

year till nothing but weeds. The cotters all ſow flax on bits of land, and dreſs and ſpin it, and it is woven in the country for their own uſe, beſides ſelling ſome yarn. The little farmers keep no ſheep.

The chief improvements of waſtes are the bottoms adjoining to the bogs, which they drain and cover with gravel or earth, that produce good potatoes.

No other way of laying land to graſs, than ſowing red clover, or oftener nothing, and leaving it.

Meadows for the year let from 3 to 4l. an acre, merely for the hay, upon which they get 10 load an acre. Graſs is moſtly applied to fattening cows which they buy in in May at 4l. and ſell in November at 6l. one acre of good land will do for them, but if not good one and a half.

The cows give two to three gallons of milk a day, and yield 40s. produce per year by butter and calf. Feed them in winter with oat-ſtraw, and hay. An ox hide, if it weighs 100lb. three pence per lb. if not two-pence halfpenny. A cow hide two-pence halfpenny if above 60lb. if leſs two-pence. Dearer than they were.

The tillage is all done with horſes, uſe four in a plough, and do better than half an acre a day. The price with harrowing 10s. an acre.

acre. The depth ſix inches for winter corn; they lay the lands in round ridges four or five feet broad. Keeping a horſe the ſummer at graſs 1l. 10s. No cutting chaff, but throw their own away in the winnowing. The hire of a car, and horſe, and driver, ten-pence a day. In hiring and ſtocking farms, they will take one of 50 acres, without any thing but four horſes and ſix cows, depending for food upon what they bring; for labour upon themſelves and the cotters that come with them; and make none or ſcarce any profit.

Land ſells at 21 years purchaſe rack rent, rents have fallen 25 per cent ſince 1770. In 1768, 1769, and 1770, they were much above their value. Tythes are compounded for, wheat, bere, and barley 7s. oats 5s. meadow 2s. ſheep 3d. No tea drank.

Leaſes common are, 31 years to catholicks, and three lives to proteſtants. Great part of the country let to middle men, who re-let it to ſub-tenants, generally with a profit greater than they pay the landlord. Carry their corn to the mill of Carrick five miles off. Rents of cabbins 20 to 25s. with a rood of ground, if land with it, which is generally the caſe, they pay 30s. an acre. For grazing a cow 25s. and for a horſe 30s. No emigrations. Twenty to one of the lower people Roman Catholics.

Expenſe of building a cabbin 40s. and for a farm of 50 acres 5l. They will hire farms and take all the buildings upon themſelves.

Both

Both cotters and little farmers are in a worſe ſituation that they were 20 years ago. All of them have turf for firing, and one week's labour in a year will ſupply a cabbin.

Cutting turf 3d. a kiſh or cubical yard

A ditch ſix feet wide, and five deep 20d.

In burning lime, a kiſh of turf burns 2 barrels of lime.

Sells at the kiln at 6d. a barrel.

Among Lord Longford's farms in this country are the following:

	£.	Let	£.
276 acres	75 rent	1736 worth now	250
410	112	ditto	410
242 150 bog	70	ditto	240
600 400	118	ditto	600
150	49	ditto	140
122	41	ditto	100
270	95	ditto	270
330	100	ditto	100
377	334	1773	334
60	16	1739	40
383	150	1749	300
655 1500 bog	225	ditto	700
303	121	1750	300
325	236	ditto	320
457	186	1756	400
	1928		4504

From which table may be ſeen the comparative value of lands in 40 years: it has more than doubled in 30.

Graſs

Graſs land, gravelled, will let to the poor at 5l. for potatoes. Very good old graſs, without any manure, 4l. 4s. and as much more for the ſecond year for flax: after that, would give 3l. for oats, and they will give 5l. for dunged ſtubble for potatoes.

The expenſes per acre, of a crop:

	£.	s.	d.
Rent - -	5	0	0
4 Barrels of ſeed -	1	0	0
Planting -	3	0	0
Taking up -	1	10	0
	10	10	0

The crop 80 barrels. Prime coſt 2s. 6d.

Lord Longford has ſome black bottom land, as it is called here; that is, black red bog partially drained ten or twelve years ago, ſome of it tolerably dry: other parts ſo wet, that a beaſt can ſcarcely venture on it with ſafety. One part is a reddiſh bog, three feet deep, which 12 years ago, was burnt a foot deep; and at the ſame time open drains made 10 feet wide at top, and 7 deep, the bog being formed by the drains into beds 40 feet wide. The ſpontaneous rubbiſh, heath chiefly is now coming faſt again, but it never has been cultivated; where the fires were made are ſpots of fine white clover. This land, at preſent, would let for nothing. but it is highly improveable.

His

His Lordſhip has had two acres and an half of turnips on juſt ſuch, and the crop was exceedingly good: he has always remarked in burning, that wherever there were many aſhes, there are ſure to be good turnips. The two acres and an half kept ſeven bullocks, each 8 cwt. and ſixty ſheep, three months. On four acres of the ſame ſort, he has now a crop of turnips ſown: it was drained 10 years ago. This ſummer he dug it over, levelled it, and burnt the ſpit in great heaps: this digging coſt 3l. 10s. an acre. The burning 1l. It was harrowed with bullocks, which, with ſeed, &c. he reckons 10s. in all 5l. an acre, which expenſe he knows by experience is repaid by the crop of turnips. In harrowing, if a bullock in a ſoft place ſinks in, they ſlip the harneſs off him, and ſet the others to drag him out by the horns, fixing the rope round the horns as in hoiſting an ox into a ſhip.

I remarked, upon this boggy bottom, a ſmall plantation of Scotch firs, which did very well, and larch ſtill better. Willows will not thrive. A gentleman incloſed and drained 4 acres, which he planted with them, and they ſhot away for four years, but then all died. They do, however, very well in the turf itſelf, if the upper ſurface of ſpunge is cleared away. In improving any bogs, Lord Longford thinks the tillage ſhould be renewed alternately with graſs every ſix or ſeven years, or it will cover again with heath (*erica*) burning it the beſt way.

His

His lordſhip has tried cabbages ſeveral times, and he finds that while they laſt they are better than turnips, but prefers the latter on account of the ſhort duration of the former.

Limeſtone gravel he has tried on a large ſcale, lays 1000 loads an acre, at 1l. 10s. expenſe, if it is in the field. The effect prodigious wherever it is laid. On a bare rocky ſpot in the front of the houſe, where the earth had been cleared away, and there was no vegetation but of weeds, ſome gravel was ſpead, and it brought up an exceeding thick coat of white and red clover. It is alſo infallible in deſtroying moſs.

July 4th, Lord Longford carried me to a Mr. Marly's, an improver in the neighbourhood, who has done great things, and without the benefit of ſuch leaſes as proteſtants in Ireland commonly have. He rents 1000 acres; at firſt it was at 20d. an acre, in the next term 5s. or 250l. a year, and he now pays 850l. a year for it. Almoſt the whole farm is mountain-land; the ſpontaneous growth heath, &c. he has improved 500 acres. His method has been to grub up the rubbiſh, and then to ſummer fallow it, and to manure it with limeſtone gravel 1400 load an acre, at the expenſe of 2l. 2s. Upon this he ſows wheat or bere, gets 9 barrels an acre of wheat, and 19 of bere, then oats 12 to 15 barrels. After which he fallows again, and finiſhes the ſecond or third

third courſe with red clover, ſown with barley or oats after wheat. If this takes very well, he leaves it to turf itſelf. White clover comes as faſt as the red wears out; for the firſt four or five years it ſupports only ſheep, but as it improves, which it does very faſt, he grazes it with black cattle.

Lime he has tried inſtead of gravel, 160 barrels an acre at 1s. but it did not better than gravel at one-fourth the expenſe. In gravelling, the beginning of the pit he has found good for nothing; and the deeper it is dug, it is ſo much the better. It will not do twice, but will laſt 8 crops, with 2 fallows.

Juſt ſuch an account would be given of marle in Norfolk, if they practiſed ſo bad a courſe of crops. Any manuring with ſo powerful an alcaly as marle leaves the ground, after an exhauſting courſe of crops, in much worſe order than it found it. Would but the Iriſh farmers purſue the Norfolk ſyſtem, of never letting two crops of white corn come together, they would not then find their gravel exhauſted in 8 crops: it would probably laſt 20, and in that management they might gravel again and again.

He has the white light marle under boggy bottoms, and has uſed much of it, but does not find it anſwer ſo well as gravel.

He applies his graſs to fattening cows, &c. in the ſyſtem I have mentioned more than once; ſheep he both buys in to fat, and keeps his own breeding ſtock.

He is very attentive in fattening his wethers; he buys in October at 30s. or 32s. each, begins at Chriſtmas to feed them with bran and oats, one quart of each per diem, and continues it for three months: has ſold at 3l. 5s. but on an average at 40s. This he thinks better and cheaper than turnips, which he has tried, but finds too dear in the expenſe of drawing, and if fed in the field, thinks half of them loſt; the oats at 5s. 6d. a barrel, the bran at 1s.

	£.	s.	d.
90 Days oats 1l. ſay 3 buſhels, at 5s. 6d. a barrel - - -	0	4	1
90 Ditto bran - - -	0	0	9
	0	4	10

It was with regret I heard that the rent of a man who had been ſo ſpirited an improver, ſhould be raiſed ſo exceedingly. He merited for his life the returns of his induſtry. But the cruel laws againſt the Roman Catholics of this country, remain the marks of illiberal barbariſm. Why ſhould not the induſtrious man have a ſpur to his induſtry whatever be his religion; and what induſtry is to be expected from them in a country where leaſes for lives are univerſal, if they are ſecluded from terms common to every one elſe? What miſchief could flow from letting them have

leaſes

leaſes for life? None; but much good in animating their induſtry. It is impoſſible that the proſperity of a nation ſhould have its natural progreſs, where four fifths of the people are cut off from thoſe advantages which are heaped upon the domineering ariſtocracy of the ſmall remainder.

In converſation with Lord Longford I made many enquiries concerning the ſtate of the lower claſſes, and found that in ſome reſpects they were in good circumſtances, in others indifferent; they have, generally ſpeaking, ſuch plenty of potatoes, as always to command a bellyful; they have flax enough for all their linen, moſt of them have a cow and ſome two, and ſpin wool enough for their cloaths; all a pig, and numbers of poultry, and in general the complete family of cows, calves, hogs, poultry, and children, pig together in the cabbin; fuel they have in the utmoſt plenty; great numbers of families are alſo ſupported by the neighbouring lakes which abound prodigiouſly with fiſh; a child with a packthread and a crooked pin, will catch perch enough in an hour for the family to live on the whole day, and his Lordſhip has ſeen 500 children fiſhing at the ſame time, there being no tenaciouſneſs in the proprietors of the lands about a right to the fiſh; beſides perch, there is pike upwards of five feet long, bream, tench, trout of 10lb. and as red as a ſalmon, and fine eels; all theſe are favourable circumſtances, and are very conſpicuous in the numerous and healthy families among them.

Reverſe the medal: they are ill cloathed, and make a wretched appearance, and what is worſe, are much oppreſſed by many who make them pay too dear for keeping a cow, horſe, &c. They have a practice alſo of keeping accounts with the labourers, contriving by that means, to let the poor wretches have very little caſh for their year's work. This is a great oppreſſion, farmers and gentlemen keeping accounts with the poor is a cruel abuſe: ſo many days work for a cabbin —ſo many for a potatoe garden—ſo many for keeping a horſe—and ſo many for a cow, are clear accounts which a poor man can underſtand well, but farther it ought never to go; and when he has worked out what he has of this ſort, the reſt of his work ought punctually to be paid him every Saturday night. Another circumſtance mentioned was the exceſſive practice they have in general of pilfering. They ſteal every thing they can lay their hands on—and I ſhould remark, that this is an account which has been very generally given me: all ſorts of iron hinges, chains, locks, keys, &c.—gates will be cut in pieces, and conveyed away in many places as faſt as built; trees as big as a man's body, and that would require ten men to move, gone in a night. Lord Longford has had the new wheels of a car ſtolen as ſoon as made. Good ſtones out of a wall will be taken for a fire-hearth, &c. though a breach is made to get at them. In ſhort, every thing, and even ſuch as are apparently of no uſe to them—nor is it eaſy to catch them, for they never carry their ſtolen

ſtolen goods home, but to ſome bog-hole. Turnips are ſtolen by car loads; and two acres of wheat pluckt off in a night. In ſhort, their pilfering and ſtealing is a perfect nuiſance! How far it is owing to the oppreſſion of laws aimed ſolely at the religion of theſe people, how far to the conduct of the gentlemen and farmers, and how far to the miſchievous diſpoſition of the people themſelves, it is impoſſible for a paſſing traveller to aſcertain. I am apt to believe that a better ſyſtem of law and management would have good effects. They are much worſe treated than the poor in England, are talked to in more opprobrious terms, and otherwiſe very much oppreſſed.

Left Packenham-hall.

Two or three miles from Lord Longford's, in the way to Mullingar, the road leads up a mountain, and commands an exceeding fine view of Loch Derrevaragh, a noble water eight miles long, and from two miles to half a mile over; a vaſt reach of it, like a magnificent river, opens as you riſe the hill. Afterwards I paſſed under the principal mountain, which riſes abruptly from the lake into the boldeſt outline imaginable; the water there is very beautiful, filling up the ſteep vale formed by this and the oppoſite hills.

Reached Mullingar.

It was one of the fair days. I ſaw many cows and beaſts, and more horſes, with ſome wool: the cattle were of the ſame breed that I had generally ſeen in coming through the country.

July

July 5th, left Mullingar, which is a dirty ugly town, and taking the road to Tullamore, ſtopped at Lord Belvidere's, with which place I was as much ſtruck as with any I had ever ſeen. The houſe is perched on the crown of a very beautiful little hill, half ſurrounded with others, variegated and melting into one another. It is one of the moſt ſingular places that is any where to be ſeen, and ſpreading to the eye a beautiful lawn of undulating ground margined with wood. Single trees are ſcattered in ſome places, and clumps in others; the general effect ſo pleaſing, that were there nothing further, the place would be beautiful, but the canvaſs is admirably filled. Lake Ennel, many miles in length, and two or three broad, flows beneath the windows. It is ſpotted with iſlets, a promontory of rock fringed with trees ſhoots into it, and the whole is bounded by diſtant hills. Greater and more magnificent ſcenes are often met with, but no where a more beautiful or a more ſingular one.

From Mullingar to Tulleſpace, I found rents in general at 20s. an acre, with much re-let at 30s. yet all the crops, except bere, were very bad, and full of weeds. About the latter named place, the farms are generally from 100 to 300 acres, and their courſe, 1. Fallow. 2. Bere. 3. Oats. 4. Oats. 5. Oats. Great quantities of potatoes all the way, crops from 40 to 80 barrels.

The

The road before it comes to Tullamore leads through a part of the bog of Allen, which ſeems here extenſive, and would make a noble tract of meadow. The way the road was made over it was ſimply to cut a drain on each ſide, and then lay on gravel, which, as faſt as it was laid and ſpread, bore the cars: along the edges is fine white clover.

Part of Tullamore is well built. I paſſed through it to Captain Johnſton's at Charleville, to whom I am indebted for the following account of the huſbandry of the neighbourhood.

Farms around Tullamore, are commonly 100 to 300 acres, but ſome ſmaller, and ſome of 5 or 600. The ſoil is generally a dry ſound gravelly loam, lets from 12s. to 18s. average 16s. five miles every way around. Average of land let in the whole county 15s. excluſive of bog. He thinks that one-ſeventh of the county is bog or mountain; but the latter pays from 1s. 6d. to 3s. The courſe of crops:

1. Oats on lay, ſow one barrel and an half, get 10 to 15.
2. Fallow.
3. Wheat, ſow three-fourths to 1 barrel, get 4 to 7 barrels.
4. Oats.

1. Oats.
2. Fallow.
3. Wheat.
4. Oats.
5. Peaſe.

1. Potatoes

1. Potatoes on graſs with dung, or burnbating.
2. Bere, ſow three-fourths of a barrel, get 12 to 20 barrels.
3. Wheat.
4. Oats.
5. Fallow.

Some 1. Pare, and burn for turnips.
2. Potatoes at 6l. an acre rent.
3. Bere.
4. Wheat.
5. Oats.
6. Fallow.

They are exceedingly late in ſowing, not finiſhing their wheat and bere till after Chriſtmas. They ſow rape on low grounds by the edge of bogs, upon paring and burning for ſeed; they get 12 to 15 barrels an acre, worth from 12s. to 20s. a barrel. They ſow it on the ground without covering after ploughing, and the rougher the land the better. Sow rye after it, and then oats, getting good crops; and lay it down with graſs ſeeds from lofts, or ray graſs, or clover and trefoile. For turnips on fallow, plough ſometimes thrice, oftener twice, lay on no manure for them, nor hoe them, get very bad crops. If pare and burn they plough twice; but a penalty is laid of 5l. an acre for doing it. They eat them with ſheep both drawn and on the land. Very little clover ſown. Flax is ſown very generally, from patches up to three or four acres, they do the whole of it themſelves, ſpinning and

and weaving. About Good Friday is the time of ſowing; but later ſown is bad. The ſky farmers, (and often the better ſort) that is the petty ones, let potatoe ground for it, at 6l. an acre to cotters.

Great quantities of potatoes in the trenching way, and all the dung is uſed for them. A common way is, for the farmers to let them have land for nothing, upon condition of their dunging it, which all do that have not land of their own: if not, they pay from 4l. to 6l. dunged, or turnip land fed with ſheep, which they prefer, the potatoes being drier and better. The apple potatoe is moſt eſteemed, becauſe they are great bearers, laſt through the ſummer, and have been kept two years. Not much lime uſed, having been tried, but has not anſwered; limeſtone gravel on lay to be broken up, has a very great effect. The expenſe 10s. or 15s. The graſs is chiefly applied to heifers, or ſtore bullocks; the firſt ſold in ſmall parcels at home, the latter at Ballynaſloe or Bannagher. They buy them in at a year or two years old; the firſt 30s. to 50s. the latter from 55s. to 57s. Keep them a year and four or five months, or only a year: in a year they will make, by the firſt, 25s. to 30s. and from 30s. to 40s. by the others.

Wherever the land is good enough, a few cows bought in for fattening, in May, at 1l. 15s. to 5l. and ſold with 40s. a head profit. The poor people all rear calves.

Many

Many ſheep bred; the beſt farmers breed and ſell them fat at three years old, wethers at Michaelmas, from 18s. to 24s. if in ſpring, from 24s. to 44s. Clip from 5 to 7lb. of wool.

The tillage is done by oxen, four in a plough, not half an acre a day, the ſky farmers ſometimes will put one horſe and a cow in. Oxen are reckoned beſt. They cut no chaff, but winnow in the field.

Hire of a boy, horſe and car 1s. 1d.

The ſky farmer will take 40 or 50 acres, with three or four cows and a horſe or two, and 5l. 5s. in their pockets. Tythes are compounded, 5s. for winter corn, 3s. for ſpring corn, 25s. 1000 ſheep. Mowing ground, 5s.

Land ſells for 20 years purchaſe, rack rent has fallen two years purchaſe in ſeven years, and the rent has fallen from 5s. to 3s. in the ſame time. No tea. County ceſs 6d. Very few middle men left. Cottages with half an acre, let for 20s. with two acres, which is common, 40s. No emigrations. Religion, lower claſſes all Roman. Not one cotter in ſix has a cow about towns; but in the country, about half of them have. Moſt of them have a pig, and much poultry. They are not more thieving than for a few turnips and cabbages for their own uſe, nor that to any exceſs. Many of the poor have reclaimed much bog,

bog, the premiums of the Dublin Society have induced them to do it: which are now 50s. an acre: by gradual draining, either from cutting turf, or making bounds, or from drainings purpoſely done, they get to peat, and burn it 4 to 6 inches deep, at 20s. an acre, and ſow bere, rye, or potatoes; the bere does beſt, and next year another crop of corn; and then another burning, and two more crops, the potatoes are wet, but will do for ſeed, and they will eſcape the froſt in a bog, when they are killed in the high lands. They pay nothing for the bog, having land adjoining.

They lay the bits down to graſs, ſowing ſeeds, but the crop is generally very thin and poor, and after a year or two, burn it again; ſometimes put out a little dung or gravel on the graſs, and plant it with potatoes. Some have put potatoes in upon a red bog, with no other preparation, than laying a poor, ſharp, ſandy gravel on it, and got tolerable crops.

Mr. Johnſton has cultivated cabbages for ſeveral years. In 1772 he had one acre, in 1773 2½, and ſince that, between 1 and 2 acres every year. The great Scotch ſort which he ſows in February, and plants out in 4 feet rows, and 18 inches, from plant to plant, the beginning of June. If the plants are not in the ground then, the crop will not be good. Ploughs for them twice, and dungs richly in the furrows. Horſe hoes twice or thrice, and hand weeds them; they come from 5 to 12 lb.

but

but have always began to burſt in September. Has uſed them for fattening ſheep, that would not fatten on graſs; alſo for bullocks, which throve perfectly well, likewiſe the leaves (with great care in picking) to milch cows, but the butter taſted. Finds that the principal uſe of them is for bringing on cattle that will not finiſh at graſs, and to be uſed all before Chriſtmas. Barley that has been ſown upon cabbage land which ſucceeded potatoes, a vaſt crop, 24 barrels an acre. Turnips Mr. Johnſton has had for theſe ten years, from 1 to 4 acres, and has always applied them to fattening ſheep, for which purpoſe he finds them excellent; and beſt to feed in the field, becauſe faſt in the ground for the ſheep to bite at, provided there is ſome graſs for them to lie on.

Has deviated from the common late ſowing of wheat, putting his in the beginning of September, and finds his harveſt ſo much earlier, than his is in the *haggard* (reek yard) when others are cutting.

His tillage he performs with only 2 horſes. Mr. Johnſton is a great friend to the Iriſh cars: He carries 10 to 12 cwt. of turf, 3 ſtatute kiſhes of hard ſtone turf, each horſe 10 turns a day, or 20 miles, and all done on graſs alone.

July 6th went to Rathan, where Lord Shelburne has placed a Norfolk bailiff, Mr. Vancover,

cover, for the management of a farm he took into his own hands, who brought with him a ploughman, plough, harrow and tackle. The deſign does honour to the nobleman who formed it; and Mr. Vancover is not likely to diſappoint him; he is a ſenſible, intelligent active man, who went through all the manual part of farming in a ſeven years apprenticeſhip to a great farmer in Norfolk. I found him juſt what I could wiſh, diſguſted neither with the country nor the people, pleaſed and animated with the proſpect of improvement before him, and had no doubt of ſucceſs. He was going on perfectly well; ploughing off the turf of a boggy bottom, adjoining to a great bog; burning it into ſmall heaps, and intending immediately to plough and ſow turnips, of which, he will have 12 acres this year, and purpoſes having many more the year after; he has cut ſome very long drains into the bog, deſigns attacking it, and expects to make it excellent land, though inſtead of ploughing it firſt for burning, he muſt dig it; I am clear he will not be diſappointed: he has a fine field to work upon, for Lord Shelburne has 4000 acres of bog here. The high parts of the farm, are a rough lime ſtone land, but very dry and ſound, he deſigns in winter, grubbing the rubbiſh, burning all the ſtone into lime, and ploughing it for turnips the following year. Let me obſerve, that this is the right conduct of rough land, which ſhould always be brought into turnips firſt, and not fallowed for wheat, as all the Iriſh improvers do,

do, who follow their wheat with ſo many crops of ſpring corn, that their ſoil is preſently exhauſted. If turnips are had, dung is gained, and the land in order, which paves the way to every thing elſe. Too much cannot be ſaid in praiſe of this undertaking of Lord Shelburne's. An opening is made by it, to a new field in huſbandry, which I foreſee may prove of infinite conſequence to the kingdom in general. Mr. Vancover being acquainted with ſeveral modes of improvement in England, and perfectly verſed in the Norfolk huſbandry, is placed with great judgment where he can exert both. Perhaps I was the better pleaſed with this improvement from being inſtrumental in procuring his lordſhip the perſon who is executing it. Near this place is a farm of 150 acres, and 1500 bog, to be let on a leaſe for ever, at 130l. a year.

Went from Rathan to the Glebe, a lodge belonging to Dean Coote, and from thence to Shaen caſtle, near Mount-mellick, his reſidence; paſſed near large tracts of mountain, waſte and bog; and not far from a great range of the bog of Allen. Saw but little good corn; they were burning ſome boggy bottoms in order to fallow for bere; but it ſhould be for turnips.

For the following particulars I am indebted to the obliging attention of the dean. About Shaen caſtle farms of 40 or 50 acres are very common, ſome few riſe to 3 or 400. The ſoil is

is either lime-ſtone, lime-ſtone gravel, or moor; lets at 13s. an acre on a medium.

THE COURSE.

1. Fallow. 2. Wheat, ſow 1 barrel, produce 5½. 3 Peas, ſow ¾ barrel, and get 5 to 10!

1. Fallow. 2. Wheat. 3. Oats, ſow 2 barrels, get 8 to 15.

Alſo, 1. They burn moors for turnips: no hoeing, draw them for ſheep. 2. Barley or bere, ſow 1 barrel of bere, get 8 to 18. Sow of barley 1 barrel, get as much barley as bere. 3. Oats. 4. Oats; after which they leave it to graze itſelf. Alſo on moory lands, rape or rye inſtead of, or after turnips.

Flax is ſown by all poor people and little farmers for their own uſe.

Potatoes are ſo much planted that all the dung of the country is applied to them; ſome few plant them with the plough, but it does not well, unleſs the land is ſummer fallowed: the chief culture is in the gardens of the cabbins, for they hire no land of the farmers for potatoes. No ſheep folding. Lime-ſtone gravel is much uſed for tillage land, and the benefit found great for ſix or ſeven crops.

The graſs is applied to fattening, dairying, and ſheep. Dairies from 30 to 40 cows are common here; they keep them in their own hands. An acre and a half of middling graſs for a cow. Some make butter, but none, if the

the cheeſe is good. 1½ cwt. of cheeſe is a good produce per cow, price from 25 to 30s. per cwt. with 1l. 1s. for the calf, at 5 or 6 weeks old: rear very few.

The fattening ſyſtem is to buy in at 3l. to 6l. in April, May, and June, and ſell out with 30s. or 42s. profit, quite to Chriſtmas. Flocks of ſheep riſe to 5 or 600; the profit lamb at 5s. to 9s. and the ewe's wool 4lb. In the winter they are on the walks, unleſs in froſt and ſnow, when they get ſome hay or turnips. Wool 15s. to 17s. a ſtone, but within 15 years was 10s. 6d. It is bought up by combers, who keep ſpinners in the country to ſpin it into yarn, which is ſold to factors for foreign markets. They are much troubled with the rot upon the moors, and a wet ſeaſon will rot them even on lime-ſtone land. Plough moſtly with horſes, uſing 4, often for the ſecond time of fallowing 6: they do ¾ of an acre; 4 bullocks, which gentlemen and good farmers uſe, will do ½, price 7s. an acre. For winter corn they throw the lands narrow, and arched up: no ſhovelling furrows, but ſtrike them with the plough. Keeping a horſe 3l. 3s. a year, and a working bullock 40s. Break their fallows from November to February. Hire of a horſe, boy, and car from 1s. 1d. to 1s. 4d.

In hiring and ſtocking farms 3l. an acre they reckon neceſſary.

Land

Land ſells at 20 years purchaſe; has fallen in 5 or 6 years 2s. to 6s. an acre, in general 5s. Tythes are compounded for, wheat 7s. bere 6s. barley 5s. oats 3s. 6d. mowing ground 3s. peaſe 2s. 6d. No tea in the cabbins, nor yet a bellyfull of potatoes. They have an acre of land and a cottage for 1l. 1s. to 1l. 10s. and about $\frac{3}{4}$ of that in potatoes, they buy when they have not of their own, both oats, meal, or potatoes: a barrel of potatoes will laſt a man, his wife, and four children a week; one barrel of oats will yield 1 cwt. of oatmeal, which ſells at 8s. 6d. to 10s. and will in *ſtir-about* laſt them a week, that is the ſame time as a barrel of potatoes. They in general keep a cow at 1l. 1s. to 1l. 10s. but they muſt buy 12s. to 14s. of hay for her. They alſo keep a pig on offal.

Stealing is very common, they take every thing they can lay their hands on, yet are not ſo poor here as in Clare and Tipperary. Corn all carried to Dublin for the premium, that on the malt and flour pays all the expenſes, but not the wheat. Population evidently increaſes. No emigrations. Religion of the lower claſſes all catholick. A poor man's firing 14s. or 15s.

Expenſe of building a cabbin 3l. 3s. of ſtone and ſlate 20l. all to a farm of 50 acres, of ſtone and ſlate 300l.

In converſation upon the ſubject of a union with Great Britain, I was informed that no-

thing was ſo unpopular in Ireland as ſuch an idea; and that the great objection to it was increaſing the number of abſentees. When it was in agitation, 20 peers and 60 commoners were talked of to ſit in the Britiſh parliament, which would be the reſident of 80 of the beſt eſtates in Ireland. Going every year to England would, by degrees, make them reſidents; they would educate their children there, and in time become mere abſentees: becoming ſo they would be unpopular, others would be elected, who, treading in the ſame ſteps, would yield the place ſtill to others; and thus, by degrees, a vaſt portion of the kingdom now reſident would be made abſentees; which would, they think, be ſo great a drain to Ireland, that a free trade would not repay it.

I think the idea is erroneous, were it only for one circumſtance, the kingdom would loſe, according to this reaſoning, an idle race of country gentlemen, and in exchange their ports would fill with ſhips and commerce, and all the conſequences of commerce; an exchange that never yet proved diſadvantageous to any country.

The Dean's improvements of bog ground are extenſive; he drained very completely, and then ploughed or dug it for burning, upon which ſowed meſlin, which ſucceeded very well, yielding 13 barrels an acre. Then oats ploughed for, and got 10 barrels; and ſowed hay ſeeds, ray graſs *(colium perenne)* and clover

clover *(trifolium pratenſe:)* before the improvement began, it was not worth 1s. 6d. an acre, but made it 14s.

Another part of the bog was leveled and burnt, the aſhes ſpread, and turnip ſeed harrowed in, did very well, fed ſheep with them; after which, rubbiſh, clay, and lime-ſtone gravel ſpread on it, 1000 load an acre, or 40s. an acre, and graſs ſeeds ſown, which made it worth 1l. 1s. an acre. Turnips, Dean Coote has had theſe 20 years, both in the drill and broad-caſt, and found the drill method much the beſt, but owing, I apprehend, to the hoeing of the broad-caſt not being well performed. Had them always for feeding ſheep, and found the eating equal to a coat of dung.

He folded his ſheep for two years, but could not bring his people to continue it without too much trouble.

Lime he has tried much on the lime-ſtone ground, but did not find it anſwer at all.

Would recommend in the improvement of bogs, to begin with one great drain round the intended improvement, 12 feet wide at top, cut to the gravel, and 4 feet wide at bottom; then to cut croſs drains into that, which alſo ought to go down to the gravel: leave it for a year, if it is bad; then turn it up with the ſpade or plough, burn it, and ſow turnips or rape, and do it again the ſame next year,

with a ſecond burning, after which oats may be had, and laid down to graſs, which will be good, but much better if gravelled. Dean Coote has received from the Dublin ſociety ſeveral gold medals for the improvement of bog, culture of turnips, &c.

July 8th, left Shaen Caſtle, and took the road towards Athy; breakfaſted with Dean Walſh, at General Walſh's, in that gentleman's abſence.

The General is a conſiderable farmer, and a yet greater improver; he has built 12 new farm houſes, alſo 30 cabbins that have 90 cows, and each 2 to 4 acres, at 20s. an acre.

He has tried potatoes with the plough, inſtead of the trenching way, he manured 2 acres of ſtong land with 400 load of dung, which he ploughed in, and then dibbled the ſets in, 15 inches ſquare, he hand-hoed them twice, and got 176 barrels per acre. The common crops do not exceed 90 barrels.

He has generally 7 or 8 acres of turnips, and 2 or 3 of cabbages, with which he feeds both cattle and ſheep, and with great ſucceſs. He practices tillage principally to bring his land into order, and throws it into the following courſe.

1. Fallow. 2. Wheat. 3. Clover or trefoile, 2 years.

When

When he ſows barley on potatoe land, he gets 20 barrels an acre. One article in the management of his eſtate cannot be too much praiſed: wherever he lets a farm that has only a common ordinary cabbin on it, he obliges the new tenant to build a good houſe of ſtone and ſlate, allowing him conſiderably towards the expenſe. The common courſe of crops here is,

1. Fallow. 2. Wheat, yielding from 7 to 9 barrels. 3. Barley, 15 barrels. 4. Oats, 15 to 20. 5. Left for Graſs.

The poor here have all of them potatoes, as far as their dung will go: when they hire graſs land to plant them on, the account of an acre is as follows:

	£.	s.	d.
10 barrels of ſeed, at 3s. 4d.	1	13	4
Planting, cutting, &c. - -	1	10	0
Second trenching - - -	0	15	0
Weeding - - - -	0	2	6
Taking up, 40 men a day at 7d. -	1	3	4
Rent - - - - -	3	10	0
	£. 8	14	2

The average crop 80 barrels, which is 2s. 2d. a barrel prime coſt.

They have them the year round in plenty; they are cheaper than oatmeal, and they like them better. They ſow very little flax, and ſome

ſome none at all. Many of them are maſter of a car and horſe, with which they work for hire; alſo one or two pigs, and much poultry by means of their potatoes.

Leaving General Walſh's, paſſed a fine wood on the right, within a wall. See much good wheat and bere to Athy. Going through that town the road leads on the banks of the river Barrow, which winds through the vale to the right; the verdure beautiful, and the country pleaſant. Paſs over much light dry ſandy gravelly loam, as fine turnip land as I ever ſaw, but not one cultivated in the country. It is this ſoil all the way from Athy to Carlow; lets from 16s. to 20s. an acre. The courſes are:

1. Fallow. 2. Wheat, yielding 5 or 6 barrels.

Alſo, 1. Fallow. 2. Wheat. 3. Oats, and graſs ſeeds, or left to turf itſelf, they uſe lime with ſucceſs: they have gravel, but that does beſt for ſtrong lands, and this upon land formed for 20 barrels an acre of barley after turnips. Theſe people by the Norfolk huſbandry would make a crown where they now receive ſix-pence.

Called on Mr. Vicars at Ballynakill, a conſiderable grazier, who farms near 2000 acres in different counties. His huſbandry conſiſts chiefly of feeding ſheep and bullocks: one ſheep ſyſtem is to keep ewes for breeding, the ſale being 3 year old wethers, ſome of the

the oldeſt ewes and the wool. The wethers ſell from 20 to 28s. each, and the quantity of wool 2½ to a ſtone, (the ſtone of wool in Ireland 16lb.) Another ſyſtem is to buy in ewes in autumn, and to ſell the lambs fat, and then the ewes. Grazing, in this country, conſiſts in buying bullocks in October, at 5l. or 6l. each; give them ſome hay in bad weather, and ſell them fat, with 40s. or 50s. profit. Cows are bought in in May, and ſold fat from harveſt to autumn. Many dairies, not let to labourers, but kept for making butter; a cow will make 1 cwt. at 2l. 10s. and the calf 4s. The cabbins let here at 20s. each, and 30s. they pay for the paſturage of a cow, which they all keep. The account of potatoes is:

	£.	s.	d.
Rent - - -	5	0	0
8 Barrels of ſeed, 4s. 6d. -	1	16	0
Putting in - -	2	10	0
Taking up - , -	1	10	0
	10	16	0

The average crop 60 barrels, prime coſt therefore 3s. 6d. Average rent of the whole county of Carlow, 15s.

Paſſed on to Mr. Browne at Brownſhill, who has built a very good and convenient houſe, in an open ſituation, commanding an extenſive proſpect; gained here ſeveral articles of information relative to the ſame neighbourhood as Mr. Vicar is in. They plough chiefly with oxen, four in a plough, but do not

not half an acre a day, which is a quantity four horſes will do eaſily.

Tillage is very much increaſed here, and almoſt intirely owing to the inland premiums; the people alſo increaſe much. Tythes are, Wheat 5s. Bere 4s. Barley 3s. Oats 2s 6d. Mowing ground 3s. and of ſheep in kind.

Throughout the county of Carlow the hiring tenant is in general the occupier, except in ſmall pieces.

In front of Mr. Browne's houſe is a mountain, which I remarked was cultivated very high up the ſides; and upon enquiry found that it was done by cotters, who pay the high rent of 10s. an acre in order to improve: they pare it with a plough, and burn the furrow, lime and fallow it for wheat, of which they get ſix barrels per acre; after which they ſow oats, and get ten barrels, laying down with graſs ſeeds. Some they reclaim with potatoes. Much of the mountain is wet, ſo that they are forced to drain it with open cuts.

Mr. Browne keeps 800 ſheep, which conſiſt of 200 ewes; 100 ditto, 2 years old; 100 ditto, 3 years old, wethers; 200 ditto 1 year old, ditto *hoggits*; 200 lambs. And he ſells every year

120 three year old wethers, at 25s.	£. 150	0	0
80 culled ewes, at 16s. -	64	0	0
220 ſtone of wool, at 16s. -	176	0	0
	390	0	0

In the winter they eat, of hay, 25 ton.

Heard

Heard of a very ſpirited farmer at Carlow, a Mr. Hamilton, on whom I ſhould have called, but was told that he was abſent. He has gone ſo much into the turnip huſbandry as to have 100 acres in a year, and 8 or 10 acres of cabbages; ſows them much on pared and burnt land; keeps by their means a vaſt ſtock of cattle; ſtall feeds many bullocks, buying ſtraw for litter in order to make dung; beſides which he buys all the dung he can, and burns much lime, taking in ſhort every means to keep his lands clean and in good heart. Such an example ought to be powerful in creating imitators, but I could not find it had any ſuch effect among the common farmers.

July 9th, left Brownſhill, and taking the road to Laughlin-bridge, called on Mr. James Butler at Ballybar, a very active and intelligent farmer upon a conſiderable ſcale. He has generally 4 or 5 acres of cabbages, which he uſes for his fat wethers of four years old; the produce of them he finds greater, and the ſheep too like them better than turnips. He has ſometimes 20 acres of turnips, and hoes them all. This year none.—It is a ſign the cultivation is not well underſtood in a country, when a man has one year 20 acres, and another none. A principal part of the advantage of the conſumption is loſt, if the cattle ſyſtem is not regularly arranged with an eye to the turnip crop.

Mr. Butler buys every year 40 year old beaſts, at from 30s. to 40s. Keeps them till three

three years and an half old, and then ſells them fat. Alſo 20 bullocks, at 5l. which he ſells fat at 8l. His cows he buys in May, from 3l. to 3l. 10s. each. The profit 40s. a head. The beſt graſs he has will carry a bullock an acre. His ſheep ſyſtem is to buy three year old wethers in October, at 25s. each, which he begins to ſell in the ſpring, and through the ſummer, at 34s. In the winter they have hay.

His improved courſe of crops is:

1. Turnips, or cabbages. 2. Barley, yielding 20 barrels an acre. 3. Clover, and upon that graſſes afterwards to lay down.

The courſes general are:

1. Fallow.	1. Potatoes.
2. Wheat 7½ barrels an acre.	2. Wheat.
3. Barley.	3. Barley, 14 barrels an acre.
4. Oats.	4. Oats, 12 ditto.
	5. Fallow, and then as above.

Their lands let at 30s. an acre, being a very good ſtony loam. Moſt in this neighbourhood were grazing ones, carrying bullocks and ſheep; but ſince the premiums on land-carriage corn, they have been broken up, and are now as 1 to 20. The number of ſheep particularly is ſo much leſſened, that only four perſons, Mr. Bunbury, the two Mr. Bernards', and Mr. Keef, had, 20 years ago, more ſheep among them than there are now in the whole county.

Having taken a ſhort walk with Mr. Butler, paſſed on to Captain Mercer's mill at Laughlin-bridge. I had been told that this was one of the moſt conſiderable mills in Ireland; and had

had a letter of recommendation to Mr. Mercer, which through careleſſneſs I had loſt. I did not care, however, to paſs without ſeeing the mill, drove down to it, and was in the aukward ſituation of explaining myſelf to be a traveller—what I wanted—from whence I came—and ſo forth: but the good-nature and politeneſs of Mr. Mercer preſently diſſipated the diſagreeableneſs of thoſe firſt explanatory moments. He ſhewed me the mill, and explained every thing with the utmoſt civility. It is a very large and convenient one; grinds 15,000 barrels a year, and if there was a briſker demand could do yet more.

I found the ſame neceſſity of kiln drying here as at Slaine mill, and made the ſame obſervation that the wheat was none of it of a fine bright colour, like what is common in England.

The farmers alſo dreſs their corn in ſo ſlovenly a manner, that there is the ſame neceſſity of dreſſing it over again, for which very powerful machines are contrived. The whole is very well calculated for ſaving labour in every operation, and only eight hands are employed. After the mill was built, Mr. Mercer made many alterations of his own, to render it more ſimple and effective, which have fully anſwered his expectations. The barrel of bran here is 4 ſtone, and ſells for 8d. Mr. Mercer has tried feeding cattle with it, but could never make more than 6d. by it: has

has alſo fattened hogs with it, but in no uſe will it pay more than 6d.

Nothing intereſting from hence to Kilfaine. I ſaw ſome very good crops of wheat, but the country is bleak, and wants wood much. Reached Gervas Parker Buſhe's, Eſq; at that place in the evening, who received me with a politeneſs equalled only by the value of his intelligence.

July 10th, accompanied Mr. Buſhe, in a ride through the neighbourhood, to view the country, which is a great corn one. Called at ſeveral farms, and made enquiries into the culture, &c.

Viewed Mount Juliet, Lord Carrick's ſeat, which is beautifully ſituated on a fine declivity on the banks of the Nore, commanding ſome extenſive plantations that ſpread over the hills, which riſe in a various manner on the other ſide the river: a knole of lawn riſes among them, with artificial ruins upon it, but the ſituation is not in uniſon with the idea of a ruin, very rarely placed to effect, unleſs in retired and melancholy ſpots.

The river is a very fine one, and has a good accompanyment of well grown wood. From the cottage a more varied ſcene is viewed, chearful and pleaſing; and from the tent, in the farther plantation, a yet gayer one, which looks down on ſeveral bends of the river.

It

It was impoſſible for any one to take more pains, that I ſhould be well informed of every particular concerning huſbandry, than Mr. Buſhe; the following particulars I owe to his moſt ample intelligence.

About Kilfaine, farms riſe generally from 100 to 200 acres, among many very ſmall ones, but ſcarcely any ſo high as 400; the ſoil a dry ſound gravelly loam, with many ſtones, much inclinable to ſand. As fine turnip-land as any in the world; as to rent, there are three-fifths of it good land, at 20s. an acre; one-fifth worſe, and fit for paſture 15s. and another mountain and land of little value: the firſt nothing; the other 5s. average 3s. and general average 16s.

The courſes of crops are,

1. Fallow. 2. Wheat, ſow 1 barrel, and get on an average 6. 3. Barley, the crop 10 barrels. 4. Oats, the crop 8 ditto, or

1. Fallow.	1. Fallow.
2. Wheat.	2. Wheat, which ſurprized me much, for it is very co trary to the ſpirit of ſ- ceſſive crops.
3. Oats.	
1. Potatoes.	1. Potatoes.
2. Wheat.	2. Bere crop, 10 barrels.
3. Barley.	3. Barley.
4. Oats.	4. Oats.

They plough three or four times for wheat, ſow from the end of September to the middle of November. The firſt ploughing is not till

May

May or June, and ſometimes, as I have ſeen, not till July. They never ſow Barley till April, and often May. Peaſe they only ſow on land which they think is not in heart for oats, and the crops miſerable, as may be ſuppoſed. They ſometimes burn low ruſhy bottoms, and ſow rape on them, but not often.

No ſuch thing as turnips among the common farmers, though they have an excellent turnip-ſoil. Mr. Buſhe has ſome every year, with which he feeds his ſheep.

No clover. Mr. Buſhe has had it for ſome time, and found the greateſt advantage from it. A little flax for their own uſe. Potatoes very generally cultivated, and take all the dung of the farm; and the poor, who raiſe what dung they can, have land of the farmers gratis, if they manure it well, in order to plant potatoes, which here is the moſt general culture of that root. The account,

	£.		
Dunging 240 load - -	1	0	0
12 barrels of ſeed, at 3s. - -	1	16	0
Planting with a plough - -	0	16	0
Weeding - - -	0	4	0
Taking up - - -	1	8	0
	5	4	0

Plough them in, and then trench the furrows. Crop 40 barrels. The beſt ſort are the yellow potatoe, alſo the *wiſe* for produce. The *Turk*, which is the Engliſh *Howard*, they plant on poor land, and never beſtow any dung on it, yet

yet get great crops; but it is a very bad ſort. They are beginning to cultivate the mountains; the incloſures creep up the ſides gradually; they pay 2s. to 4s. an acre, but improve to be worth 8 or 10s. They do it with lime-ſtone gravel, or begin with potatoes, and dung; the gravel they carry 2 miles to 3. Lime is a common manure; they lay 80 barrels an acre; it does beſt on light land, and gravel on ſtony. They burn it themſelves. One barrel of culm, at 2s. burns 5 barrels of lime; 16 miles from the coal-pits. Quarrying and burning 3d. a barrel. Drawing ſtone to the kiln 1d. or 1½d. ditto. Lime-ſtone gravel is a very general manure, and the benefit prodigious. They have ſome they call lime-ſtone ſand, which is a ſort of ſand-ſtone that breaks very eaſily. They lay 200 to 300 loads, 6 or 7 cwt. each, an acre. Four horſes will draw 120 load a day, each load 1½ barrel, and the diſtance 40 perch: this is 180 barrels, or 720 buſhels, which is 24 loads, at 30 buſhels each; which, I believe, is more than four horſes uſually perform in England, and is a proof, that giving every horſe his own work expedites it. Raiſing and ſcreening the ſand from large ſtones, 1½d. a car load. It will laſt in ſtrong heart ſeveral years, and be perceived 15. As to laying land to graſs, they in general do it only by leaving the ſoil to cover itſelf with the rubbiſh that happens to come.

Graſs land for meadow is very valuable. About the town of Kilkenny, 3l. to 5l. an acre;

acre; and at a diſtance there is a cuſtom of the little tillage-farmers hiring the crop of hay of a gentleman or farmer, and giving him, merely for the hay, 3l. to 5l. an acre, they taking all the expenſes upon themſelves, and not having the after-graſs. Dairies common on the hills on coarſe graſs, at 10s. or 12s. an acre. A good cow will give three gallons and an half of milk a day. As they ſell all the butter-milk, they have little notion of keeping hogs, on account of dairies. In winter, the cows that give milk have hay; the others ſtraw: all run abroad. Few grazing farms, but in the barony of Cranagh there are ſome. Value of a cow's hide 15s. to 18s. per cwt. Sheep are kept in ſmall parcels; they ſell ſtore wethers two and three years old, at 16s. to 20s. in June or July. Wool about 3 to a ſtone. The price of wool 16s. but 20 years ago, 12s. No ſuch thing as folding. They plough generally with 4 horſes, and do above ½ an acre a day, laying their lands on 6 foot ridges. They give their horſes oats. No cutting ſtraw into chaff, and loſe all that of the crops. Hire of a car, a horſe, and a driver, 1s. 4d. In hiring and ſtocking a farm, they reckon a year's rent neceſſary; if they have leſs, they never know whether they are to ſink or ſwim.

Land ſells at 21 years purchaſe; not quite ſo well as it did 5 or 6 years ago, the rents fallen ſince March 1775, a ſeventh. County ceſs not a ſhilling an acre. Tythes compounded generally, wheat 8s. bere 7s. barley 7s. oats 4s. mowing ground 4s. peaſe 4s. No manufactory

tory of conſequence, but blankets are made at Kilkenny. The leaſes are all for 21 or 31 years, as the whole country is Roman Catholic. Much land is in the occupation of under tenants, who hire of middle men, but generally under old leaſes; when land was at its heighth, many hired alſo on ſpeculation, but the fall of lands has put a great ſtop to it. A cabbin and an acre lets at 3l. 3s. and if more land 40s. or 42s. an acre, the cotters have many of them a cow, and ſome two, and a pig and ſome poultry. In reſpect to their condition, they have their belly full of potatoes, and their children eat them all day long; all cattle lay with them in the cabbins. Scarcity of fuel is the worſt circumſtance. All the lower claſſes are Roman Catholics. No emigrations. The general ſtate of the poor will appear from the following account of Mr. Buſhe's hay-makers; he was obliging enough to make them all appear in array, and anſwer to the queſtions I put to them. The following are the particulars they gave me.

	No. of souls in each cabin.	Acres of land.	Rent.	Cows.	orses.	Hogs.
No. 1.	4	½	1 18 0	0	0	1
2.	7	0	1 1 0	1	0	1
3.	5	2	1 10 0	0	0	1
4.	5	12	5 0 0	3	0	1
5.	6	0	1 1 0	1	0	1
6.	6	0	0 0 0	0	0	0
7.	8	8	8 0 0	1	0	0
8.	8	8	8 0 0	1	1	2
9.	10	16	16 0 0	2	2	3
10.	8	8	8 0 0	1	1	2
11.	5	6	10 10 0	2	1	0
12.	8	1	1 15 0	1	0	2
13.	2	4	6 0 0	1	1	2
14.	6	6	10 10 0	1	1	3
15.	4	5	6 0 0	2	1	2
16.	6	2	1 8 0	0	0	9
17.	5	0	1 10 0	0	0	2
18.	12	12	17 8 0	2	2	2
19.	7	12	12 0 0	2	1	1
20.	6	0	0 0 0	0	0	0
21.	10	4	6 0 0	1	1	0
22.	6	8	8 0 0	1	1	2
	144	114		23	13	37
Average	6½	5⅝		1	½	1⅝

6½ souls

6½ ſouls per cabbin, are a population one would not imagine could be reſident in ſuch mean habitations, but they ſwarm with children to the eye of the moſt inattentive obſerver. They have a practice here which much deſerves attention: three, four, five, ſeven, &c. little farmers will take a large farm in partnerſhip. They muſt be equal in horſes, cows, and ſheep, and tolerably ſo in other circumſtances; they divide every field among themſelves equally, and do all the labour of it upon their ſeparate accounts; aſſiſting each other mutually: they never throw the whole into one ſtock and divide the profit, from ſuſpicions, I ſuppoſe, they have of one another.

Implements.

A car 1l. 10s. a boarded one 2l. 2s. A plough 1l. 5s. A pair of harrows 15s. Building a labourer's cabbin in the common manner 5l. Ditto, of ſtone and ſlate, 30l. For a farm complete of 50 acres, of ſtone and ſlate 100l. to add 50 acres more 30l. more. Poors firing 1l. 10s. but hedges much broken.

Mr. Buſhe is very attentive in the culture of his domain; he puts his potatoes in with the plough, and finds they anſwer much better than the common manner, making them and turnips the preparation for barley, with which he ſows clover, and upon that wheat: this is the Norfolk huſbandry, and there cannot be better. It ſhould be extended over all the arable land wherever it is practiced. He

has this year a very fine crop of wheat ſown upon one earth on an old lay, and no damage from the red-worm. In the ſpring he confines his cattle to the farm yard for making dung, and mixes it in compoſts with ſand and lime. He has an œconomical practice which deſerves attention. It is the ſtew hole in his kitchen being a perpetual lime-kiln. It is a fire kept night and day at leſs than no expenſe, for the lime more than pays the culm. It is not at all unwholeſome, and the fire for culinary purpoſes is excellent.

July 11, left Kilfaine: Mr. Buſhe accompanied me to Woodſtock, the ſeat of Sir W. Fownes. From Thomaſtown hither is the fineſt ride I have yet had in Ireland. The road leaving Thomaſtown leads on the eaſt ſide of the river, through ſome beautiful copſe woods, which before they were cut muſt have had a moſt noble effect, with the river Nore, winding at the bottom, the country then opens ſomewhat, and you paſs moſt of the way for 6 or 7 miles to Inniſteague, on a declivity ſhelving down to the river, which takes a varied winding courſe, ſometimes lively, breaking over a rocky bottom, at others ſtill and deep under the gloom of ſome fine woods, which hang down the ſides of ſteep hills. Narrow ſlips of meadow of a beautiful verdure in ſome places form the ſhore, and unite with cultivated fields that ſpread over the adjoining hills, reaching almoſt the mountain tops: theſe are large and bold, and give in general

general to the ſcenes features of great magnificence. Paſſed Sir John Haſler's, on the oppoſite ſide of the river, finely ſituated, and Mr. Nicholſon's farm on this ſide, who has very extenſive copſes, which line the river. Coming in ſight of Sir W. Fownes's, the ſcenery is ſtriking, the road mounts the ſide of the hill, and commands the river at the bottom of the declivity, with groups of trees prettily ſcattered about, and the little borough of Inniſteague in a moſt pictureſque ſituation, the whole bounded by mountains. Croſs the bridge, and going through the town, take a path that leads to a ſmall building in the woods, called Mount Sandford; it is at the top of a rocky declivity almoſt perpendicular, but with bruſh wood growing from the rocks. At the bottom is the river, which comes from the right from behind a very bold hanging wood, that ſeems to unite with the hill on the oppoſite ſhore: at this paſs the river fills the vale, but it widens by degrees, and preſents various reaches, intermixed with little tufts of trees, the bridge we paſſed over is half hid. Inniſteague is mixed with them, and its buildings backed by a larger wood, give variety to the ſcene. Oppoſite to the point of view there are ſome pretty incloſures, fringed with wood, and a line of cultivated mountain ſides, with their bare tops limit the whole.

Taking my leave of Mr. Buſhe, I followed the road to Roſs. Paſſed Woodſtock, of which

which there is a very fine view from the top of one of the hills, the houſe in the centre of a ſloping wood of 500 Engliſh acres, and hanging in one noble ſhade to the river, which flows at the bottom of a winding glen. From the ſame hill in front it is ſeen in a winding courſe for many miles through a great extent of incloſures, bounded by mountains. As I advanced, the views of the river Nore were very fine, till I came to Roſs, where from the hill, before you go down to the ferry, is a noble ſcene of the Barrow, a vaſt river flowing thro' bold ſhores, in ſome places trees on the bank half obſcure it, in others it opens in large reaches, the effect equally grand and beautiful. Ships ſailing up to the town, which is built on the ſide of a hill to the water's edge, enliven the ſcene not a little. The water is very deep and the navigation ſecure, ſo that ſhips of 700 tons may come up to the town; but theſe noble harbours, on the coaſt of Ireland, are only melancholy capabilities of commerce: it is languid and trifling. There are only four or five brigs and ſloops that belong to the place.

Having now paſſed through a conſiderable extent of county, in which the white boys were very common, and committed many outrages, I ſhall here review the intelligence I received concerning them throughout the county of Kilkenny. I made many enquiries into the origin of thoſe diſturbances, and found that no ſuch thing as a leveller, or white boy, was

was heard of till 1760, which was long after the landing of Thurot, or the intended expedition of M. Conflans. That no foreign coin was ever ſeen among them, though reports to the contrary were circulated; and in all the evidence that was taken during ten or twelve years, in which time there appeared a variety of informers, none was ever taken, whoſe teſtimony could be relied on, that ever proved any foreign interpoſition. Thoſe very few, who attempted to favour it, were of the moſt infamous and perjured characters. All the reſt, whoſe intereſt it was to make the diſcovery, if they had known it, and who concealed nothing elſe, pretended to no ſuch knowledge. No foreign money appeared; no arms of foreign conſtruction; no preſumptive proof whatever of ſuch a connection. They began in Tipperary, and were owing to ſome incloſures of commons, which they threw down, levelling the ditches; and were firſt known by the name of levellers. After that, they begun with the tythe-proctors, (who are men that hire tythes of the rectors) and theſe proctors either ſcrewed the cotters up to the utmoſt ſhilling, or re-let the tythes to ſuch as did it. It was a common practice with them to go in parties about the country, ſwearing many to be true to them, and forcing them to join, by menaces, which they very often carried into execution. At laſt they ſet up to be general redreſſers of grievances — puniſhed all obnoxious perſons who advanced the value of lands, or hired farms over

their

their heads, and having taken the adminiſtration of juſtice into their own hands, were not very exact in the diſtribution of it. Forced maſters to releaſe their apprentices, carried off the daughters of rich farmers, raviſhed them into marriages, of which four inſtances happened in a fortnight. They levied ſums of money on the middling and lower farmers, in order to ſupport their cauſe, by paying attornies, &c. in defending proſecutions againſt them; and many of them ſubſiſted for ſome years without work, ſupported by theſe contributions. Sometimes they committed ſeveral conſiderable robberies, breaking into houſes and taking the money, under pretence of redreſſing grievances. In the courſe of theſe outrages, they burnt ſeveral houſes, and deſtroyed the whole ſubſtance of men obnoxious to them. The barbarities they committed were ſhocking. One of their uſual puniſhments (and by no means the moſt ſevere) was taking people out of their beds, carrying them naked in winter, on horſe-back, for ſome diſtance, and burying them up to their chin in a hole filled with briars, not forgetting to cut off one of their ears. In this manner the evil exiſted for eight or ten years, during which time the gentlemen of the country took ſome meaſures to quell them. Many of the magiſtrates were active in apprehending them; but the want of evidence prevented puniſhments for many of thoſe who even ſuffered by them, had not ſpirit to proſecute. The gentlemen of the country had frequent

expeditions

expeditions to diſcover them in arms; but their intelligence was ſo uncommonly good by their influence over the common people, that not one party that ever went in queſt of them was ſucceſsful. Government offered large rewards for informations, which brought a few every year to the gallows, without any radical cure for the evil. The reaſon why it was not more effective was, the neceſſity of any perſon that gave evidence againſt them, quitting their houſes and country, or remaining expoſed to their reſentment. At laſt their violence aroſe to a heighth which brought on their ſuppreſſion. The popiſh inhabitants of Ballyragget, ſix miles from Kilkenny, were the firſt of the lower people who dared openly to aſſociate againſt them; they threatened deſtruction to the town, gave notice that they would attack it, were as good as their word, came 200 ſtrong, drew up before a houſe in which were 15 armed men, and fired in at the windows: the 15 men handled their arms ſo well, that in a few rounds they killed 40 or 50. They fled immediately, and ever after left Ballyragget in peace—indeed they have never been reſiſted at all, without ſhewing a great want of both ſpirit and diſcipline. It ſhould, however, be obſerved, that they had but very few arms, thoſe in bad order, and no cartridges. Soon after this they attacked the houſe of Mr. Power, in Tipperary, the hiſtory of which is well known. His murder ſpirited up the gentlemen to exert themſelves in ſuppreſſing the evil, eſpecially in raiſing ſubſcriptions

ſubſcriptions to give private rewards to whoever would give evidence or information concerning them. The private diſtribution had much more effect than larger ſums which required a public declaration; and government giving rewards to thoſe who reſiſted them, without having previouſly promiſed it, had likewiſe ſome effect. Laws were paſſed for puniſhing all who aſſembled, and (what may have a great effect) for recompenſing, at the expenſe of the county or barony, all perſons who ſuffered by their outrages. In conſequence of this general exertion, above twenty were capitally convicted, and moſt of them executed; and the gaols of this and the three neighbouring counties, Carlow, Tipperary, and Queen's-county, have many in them, whoſe trials are put off till next aſſizes, and againſt whom ſufficient evidence for conviction, it is ſuppoſed, will appear. Since this all has been quiet, and no outrages have been committed: but before I quit the ſubject, it is proper to remark that what coincided very much to abate the evil, was the fall in the price of lands, which has taken place lately. This is conſiderable, and has much leſſened the evil of hiring farms over the heads of one another; perhaps alſo the tythe-proctors have not been quite ſo ſevere in their extortions: but this obſervation is by no means general; for in many places tythes yet continue to be levied, with all thoſe circumſtances which originally raiſed the evil.

From

From Roſs took the road towards Wexford, and found upon enquiry that I was got into quite a different country from what I had left, the ſoil not near ſo high let, for ſeveral miles it is from 5s. to 15s. and is in general dry ſound land. This ſoil, ſo excellent in the turnip-culture, never lets at its real value in unimproved countries: it is the introduction of turnips alone that aſcertains that value. In 8 or 9 miles I found ſome riſing to 20s. The courſe: 1. Fallow. 2. Wheat. 3. Oats. 4. Barley. 5. Oats. 6. Barley. 7. Oats. With ſuch management, no wonder the ſoil is low rented. There is a great quantity of rough land overrun with furze *(ulex europæus.)* They burn them here, and I remarked uncommon quantities of bog-wood at the doors of the cabbins: yet their turf-grounds are rather boggy bottoms than bogs.

Laid at Taghmon, at as good an inn as the appearance of the place could allow of, though I was told it was very good. There was a bed on which I reſted in my cloaths, but the ſtable had neither rack nor manger. I ſhould have gone on to Wexford, but found that Mr. Neville, member for that town, to whom I had a letter of recommendation in order to procure intelligence concerning the baronies of Bargie and Forth, was in England; I therefore determined to turn off here, and make a circuit through them to get to Wexford. The landlord ſeemed to know ſomething of the country. I aſked him what gentlemen were

in

in it that took any pleaſure in huſbandry: he named ſeveral, and from his accounts I determined a call on Mr. Nun, at St. Margaret's.

July 12th, ſallied from my inn, which would have made a very paſſable caſtle of enchantment in the eyes of Don Quixote, in ſearch of adventures in theſe noted baronies, of which I had heard ſo much. They were completely peopled by Strongbow; and from having retained a ſort of Saxon language peculiar to themſelves, without any of them underſtanding the Iriſh, in all probability the country was at that time uninhabited or deſolated. I had been told that they were infinitely more induſtrious and better farmers than in any other part of Ireland, and this account was confirmed to me by ſeveral common Iriſh farmers I met with upon the road.—It was not long before I was in the barony of Bargie, and I was much ſurpriſed to ſee no great appearance of any thing better than common. In one reſpect, I remarked the vileſt huſbandry, which was exhauſting the land by ſucceſſive corn crops, and then leaving it to cover itſelf with weeds, and graſs by degrees: for it is to be obſerved, that I have not ſeen, in Wexford, any of that fine land I have mentioned ſo often, which, if thrown by in this manner, is almoſt immediately covered with white clover. Land, I found, let five or ſix miles from Taghmon, from 10s. to 20s. an acre; they have no fallow, but ſow oats and barley, and beans and peaſe, (which they call black corn) in ſucceſſion

ceſſion for many years, and without any ſuch practice as hoeing. And though the land is light, dry and ſound, not a turnip is ſown; ſo that, in 21 miles, I ſaw not a ſingle fallow for them. Sowing beans and peaſe is, however, common, and they have farther a notion that doing ſo refreſhes the land. I ſaw no beans in Ireland till I came here. They told me their crops were: Barley and oats 6 to 12 barrels. Beans 8 to 10 barrels. They uſe both marle and lime; of the former they lay 400 car loads per acre, and it laſts 12 crops. Much of their wheat is ſown on lays, marled and dunged, and the crops were very good. Potatoes not the food of the people the year through, as in other parts of Ireland; they live on them only in the winter, and have oatmeal the reſt of the year. Barley is the crop that ſucceeds them.

Advancing farther I had freſh accounts.—Wheat they ſow on lays, with only one ploughing, and get from 7 to 10 barrels an acre; and of oats and barley on good land ſometimes ſo high as 15 to 17 barrels. They lime much, and uſually take but four or five crops of corn running, upon which they ſeemed to pride themſelves much, as being good farmers. Farms in Bargie generally from 40 to 100 acres. Here I underſtood there was a part of the barony of Shelmal inhabited by quakers, rich men and good farmers. A farmer I talked to ſaid of them:—*the quakers be very cunning, and the devil a bad acre of land will they hire.*

From

From this account I wiſhed for a recommendation to one of theſe ſagacious friends. I obſerved all the way I went, that the cabbins were generally much better than any I had ſeen in Ireland: large ones, with two or three rooms, in good order and repair, all with windows and chimnies and little ſties, for their pigs and cattle. As well built as common in England.

Entering Forth I did not perceive any difference, but the ſoil is a reddiſh good loam without ſtones. I went to St. Margaret's, and introduced myſelf to Colonel Nun, who gave me the following particulars, with the aſſiſtance of a neighbouring farmer. Barony of Forth and Bargie farms generally 20 to 80 acres; but many of them hired in partnerſhip, and when the children marry are ſubdivided into ſmaller portions. Rent of the two baronies on an average a guinea. The courſes:

1. Potatoes.	1. Summer fallow.	1. Beans on lay.
2. Flax or barley.	2. Barley.	2. Barley.
3. Leave it for a	3. Beans.	3. Oats.
ſod, but moſt ſow	4. Oats.	4. Barley.
clover and graſſes.	5. Graſſes.	5. Clover or trefoile, for 2, 3, or 4 years.

1. Fallow and marle. 2. Wheat. 3. Barley. 4. Oats. 5. Barley. 6. Clover, &c.

For wheat they plough but once on the lay, harrow in the ſeed and ſhovel the furrows; ſow in October one-half to three-fourths of a barrel: ſome uſe ſpring wheat ſown in March. The crop generally is 10 to 20 barrels. For barley,

barley, which is their principal crop, they plough twice; ſow one barrel and an half, get 10 to 15 barrels an acre. For oats they plough but once, ſow one barrel and an half, and get 10 or 12 barrels an acre. For peaſe or beans they plough but once, ſow many beans on a lay on one ploughing, one barrel and an half per acre; chopping and dreſſing the clods fine, get 5 to 20 barrels an acre, and ſow barley after it. No turnips among the common farmers, though much of their land is fine dry and ſound, but ſome is very wet.

Flax enough for their own uſe. Potatoes they have of late began to put in with the plough, but in common they are in the trenching way. Their crops are very good. Marle is very much uſed: it is a blue ſort. They lay large quantities on the ſod, let it lie a year or two before they plough it up, which they find better than ploughing it directly. They marle the ſame land often: they drain only with open cuts, no hollow ones done.

Cattle very little attended to: only a cow or two for the uſe of their families, and a few ſheep; but they keep a great many pigs. All that live near the ſea, turn their pigs to the ſhore for fiſh, ſea-weed, &c. Manure with ſea-weed, which they lay on for barley; ſome freſh from the ſea, others lay it in heaps to rot, and many reckon it beſt freſh. Ploughing all with horſes, four in a plough; lay their lands round to ſhoot off the water. In ploughing

ploughing graſs for corn, they leave one-third of every ridge unploughed in the middle, but covered up with the furrows, in order for tilling the year following, and think they get the beſt crops there. Execrable!

Land ſells from 22 to 25 years purchaſe; nor have rents fallen at all, rather the contrary. County ceſs 8d. an acre. Tythes either gathered or appraiſed every year. Leaſes generally three lives, or 31 years. Carry their corn to Wexford. The people increaſe prodigiouſly. Rent of a cabbin and an acre 3l. generally have a cow and pigs, and plenty of poultry. Religion generally Catholic. Many lads go to Newfoundland in May, and come home in October, and bring from 15l. to 24l. pay 3l. paſſage out, and 1l. 10s. home. Poors' firing ſod, furze, and fern, coals very ſcarce. Building a cottage 5l. to 7l. to a farm of 50 acres 150l.

The people are uncommonly induſtrious, and a moſt quiet race—in 15 or 20 years there is no ſuch thing as a robbery. The little farmers live very comfortably and happily, and many of them worth ſeveral hundred pounds. They are exceedingly attentive in getting mould out of the ditches and banks, to mix a little dung with it, and ſpread it on their land.

PARTICULARS of a farm:

70 acres. 16 cows, 4 to each partner. 20 horſes, each 5. 80 ſheep. 60 ſwine. Stock worth 300l. 4 families.

And this farm by old accounts has had 90 crops of corn without a fallow or graſs, in ſucceſſion, but they manure with ſea-weed and ſea-ſand every year. They are always on the watch for ſea-weed; and when the tide comes in, if it is in the middle of the night, they go out with their cars, and get all they can. Some of the fields are ſo covered with great ſtone rocks, that one would think it impoſſible to plough them, but they manage it by attention.

They all ſpeak a broken Saxon language, and not one in an hundred knows any thing of Iriſh. They are evidently a diſtinct people; and I could not but remark, their features and caſt of countenance varied very much from the common native Iriſh. The girls and women are handſomer, having much better features and complexions. Indeed the women, among the lower claſſes in general in Ireland, are as ugly as the women of faſhion are handſome. Their induſtry, as I have mentioned in ſeveral particulars, is ſuperior to their neighbours; and their better living and habitations are alſo diſtinctions not to be forgotten. The poor have all barley-bread and pork, herrings, &c. and potatoes. On the coaſt a conſiderable fiſhery of herrings:

every creek has four or five boats—none barreled by the people, but the merchants of Wexford barrel them for the Weſt Indies.

From St. Margaret's, I took the road to Wexford, the whole way through the barony of Forth. I ſaw nothing but ſtraw hats for men as well as women, and found afterwards that they were worn through the whole county, and they give a comic appearance to every group one meets. Laid at the King's Arms at Wexford, a very clean and good inn. There are 14 or 15 ſmall ſhips belonging to this port, but a bar at the mouth of the harbour prevents large ones coming in.

July 13th, Croſſed the harbour in a ferry-boat, in order to take the lower road to Gowry. Paſſed over much ſandy land by the ſea ſide, covered with fern; large tracts of it, and divided into incloſures, as if it had been cultivated. Near the town I obſerved ſome heaps of ſea-weed rotting for manure. At the 60th mile ſtone large ſandy tracts, covered with furze and fern. As profitable land for improvement as any I have ſeen; lets for 6s. or 7s. an acre, but there is much other land at 15s.

Their courſe here is: 1. Oats, 7 or 8 barrels. 2. Barley, 6 ditto. 3. Oats. 4. Barley. 5. Clover and rye-graſs 3 to 6 years. Towards Wells, and from thence to Gowry, land is higher, much of it at 20s. and ſome higher ſtill.

Got

Got to Lord Courtown's, who with an attention highly flattering, took every means to have me well informed. His ſeat at Courtown is a very agreeable place, and in ſome reſpects a very ſingular one; for the houſe is within 600 yards of the ſea, and yet it is almoſt buried in fine woods, which from their growth and foliage, ſhew no averſion to their neighbour, who is ſo often pernicious to all their brethren. His views of the ſea are fine, every where broken by wood, or hilly varied ground. All his environs conſiſt of undulating lands, which give a pleaſing variety to the ſcene: a river enters his garden, and purſuing for ſome diſtance a ſequeſtered courſe, ſhaded on one ſide by a rocky bank well wooded, and on the other by lofty trees, with a very agreeable walk under them, pours itſelf into the ſea at a ſmall diſtance from the houſe.

Lord Courtown is a very good farmer. The firſt field of turnips I *ſaw* in Ireland was here, and he was thinning and weeding them with boys, in order to hoe them with the more effect, the land in order, well dunged, and the plants forward and flouriſhing. He generally has 7 or 8 acres, feeds his cattle with them in a farm-yard, well littered with fern and ſtraw, and ſows barley after, getting very fine crops. His ſandy lands by the coaſt he marles richly, and with ſuch effect that his crops are very great. The fineſt wheat I have ſeen yet in Ireland was on this ſand. Some of his Lordſhip's fields are wet from a ſtratum of clay;

theſe he throws into lands gently arched, lays them down ſo, and finds them ſound enough for winter feeding without poaching, whereas when flat, they are quite kneaded if any cattle go into them. On this clay ſoil he finds the beſt manure is ſea-ſand and ſhingle from the beach.

July 14, ſunday—to church, and was ſurpriſed to find a large congregation: this is not often the caſe in Ireland out of a maſs houſe. —Gallop on the ſtrand; it is a fine firm beautiful ſand for miles. The paddies were ſwimming their horſes in the ſea to cure the mange, or keep them in health.

The following particulars of the huſbandry of the neighbourhood his Lordſhip's brother gave me.

At Courtown, and around Gowry, farms in general ſmall: but from 40 or 50 to 2 or 3000 acres, yet 200 acres are a large one, but very many ſmall of 30 to 50. The ſoil is a ſkirting of ſand againſt the ſea, the reſt is gravel and gravelly loam: alſo a thin ſtratum of loam on a yellow very miſerable clay, 12 inches thick, and under it univerſally a fine blue marle of great depth. Rents riſe from 10s. to 30s. average 15s. to 20s. and of the whole county 15s. A good deal of mountain, which in its wild ſtate does not let for more than 3s. The little farmers improve it much by fallow and lime, which they bring from Carlow, 25 miles. When improved, it is worth 16s. an acre,

acre, and they pay that for it at the expiration of the leaſe.

Their courſes are: 1. Potatoes. 2. Barley, yielding 10 or 12 barrels. 3. Oats, the produce 10 or 12: and then more crops of oats, or barley and oats, till the ſoil is exhauſted, when they leave it to turf itſelf, which it will not do under 10 or 15 years. Alſo, 1. Summer fallow. 2. Wheat, 7 barrels; and then ſpring-corn crops, till the land is exhauſted. No peaſe or beans ſown. Not a turnip in the country among common farmers, though the fineſt ſands and grounds imaginable for them: nor clover. A little flax is ſown, generally after potatoes, and the culture of it increaſes gradually.

Potatoes in general put in in the common manner; but I heard of one or two farmers, who on dry ground plant them with the plough: always dung or pare and burn, no hiring of land for them, only in their own gardens and little fields; they do not often raiſe more than enough for half a year, buying for the other half. It is not a ſheep country, and no ſuch thing as folding known.

Lime is not uſed, except in the mountains, from Carlow: but marle is very general, a good blue ſort, which they ſpread amply on the ſod, and plough it for wheat. The good farmers take three crops upon it, but the little ones will take 8 or 10 as long as the land will yield any thing. The deeper they dig the marle,

marle, the better it is. They dairy much here, ſome having 20 cows for butter chiefly. It has been a common idea, that one good cow will make 1 cwt. of butter at 42s. and 1 cwt. of cheeſe 25s. and rear her calf. They all keep many pigs, and the more upon account of their dairies. Some calves are fattened for Dublin market, one will ſuck two cows, and be worth 4l. at 3 months old. No large flocks of ſheep, but moſt of the farmers have a few; generally wethers bought in and ſold out every year. Give them hay in bad weather. 3 fleeces to a ſtone of wool, the preſent price 16s. Between 30 and 40 years ago 3s. a ſtone; and 20 years ago 10s. to 11s. Tillage is performed all with horſes, 4 in a plough, and do half an acre a day. All their chaff is loſt in winnowing their corn in the fields. Hire of a car 1s. In hiring and ſtocking farms, they will take them with ſcarce any thing but a few cows and horſes, yet they pay their rents very well, and few of them fail. Land at rack rent, ſells at 20 years purchaſe, but within theſe 10 years 22 or 23. Rents have been riſing for 15 years: they have not fallen of late years as in other parts of Ireland, though in ſome places are beginning.

Tythes are valued every year, and the 10th taken as a compoſition, wheat at 18s. a barrel. Barley 8s. Oats 6s. The 10th lamb 2s. 6d. No tea in the labourers cabbins, but in thoſe of little farmers they have it, and it increaſes much. Leaſes generally 3 lives to Proteſtants, and 31 years to Catholics. The

ſyſtem

ſyſtem of middle men going out—none in new let lands.

Barley carried to Wexford for exportation, and wheat to Dublin by means of bounty on inland carriage. The people increaſe conſiderably. Rent of a cabbin with an acre 40s. if more added 20s. an acre. All keep cows, and generally a horſe and a pig or two, with plenty of poultry reared on potatoes.—They live on oat-cakes when potatoes are not in ſeaſon; the little farmers that have 40 or 50 acres, eat a good deal of meat; fiſh is a great article with the poor, particularly herrings and cod. In general much improving, and more induſtrious than formerly. In about four years, 40 or 50 perſons emigrated to America. They are beginning to improve mountain and bog, which from being worth nothing before, now let at above 20s. an acre. No farms hired in partnerſhip.

The white boys were violent for about three months in 1775, chiefly from Kilkenny and Carlow, but ſuppreſſed immediately by the ſpirited aſſociations of the gentlemen. They were heard of in the ſouth under other names before Thurot or Conflans. Poors' firing, turf ſeven miles off; 20 kiſh at 1s. 6d. a good ſtock; in common it may be reckoned 1l. 1s. Building a cabbin 6l. to 7l. 7s. Of ſtone and ſlate 20l. Ditto for a farm of 50 acres, ſtone and ſlate, 25l. Crammed fowls with potatoes and oatmeal and milk 2s. to 2s. 6d. each. Since theſe particulars were taken at Courtown his Lordſhip,

Lordſhip, by letter, has favoured me with the following, from an intelligent farmer.

COURSE OF CROPS.

1. Wheat.

Number of ploughings, four before ſowing. Firſt in November. Second in April, by croſs cutting. In June harrow it down well, then put on your manure. Third ploughing in July; harrow it down again. Fourth ditto in Auguſt, which will leave it prepared for ſowing. Seed to the acre, fourteen ſtone. Crop, at a medium, eight barrels.

2. Barley.

Two ploughings. Firſt in November. Second at the time you ſow, having firſt croſs harrowed. Seed to the acre, fifteen ſtone. Crop, nine barrels.

3. Oats.

Moſt farmers plough but once. Seed, 22 ſtone. Crop, 9 barrels.

For Potatoes.

Let your ground lie ploughed all winter; to every acre put 500 load of dung. Seed, eight barrels. Crop, 80 ditto. Price, per barrel, 5s. Uſe of lime very profitable on dry ground; quantity, per acre, from 40 to 50 barrels.

Cows' Produce.

One cow will give ten quarts of milk a day; will produce one hundred of butter. Profit, three pound.

Sheep.

Sheep.

	£.	s.	d.
Two acres will ſupport one collop, or eight ewes.			
Each ſheep a lamb, at 5s. each	2	0	0
Wool from the eight ſheep, one ſtone, at	0	17	0
	2	17	0
Two acres, at 20s. per acre - - -	2	0	0
Profit on eight ſheep, at an average,	0	17	0

Proportion of the riſe of labour is not more than 2d. per day.

Particulars of a Farm.

Arable 20 acres, 10 of barley, 4 of wheat, 6 of oats. Paſture 67 acres. Meadow 13 ditto, —Total 100 acres.—Stock, 24 Cows, 8 horſes. 7 two-year old heifers, 4 year old ditto, and four calves.—Rent 100l. Three Labourers.

Marle.

Quantity, per acre, on ſtiff clay ground, from 5 to 600 load, of about 600 weight; on dry gravelly ground, from 800 to 1000 ditto, according to the ſoil, will laſt 40 years with management.

July 15th, leaving Courtown, took the Arklow road; paſſed a finely wooded park of Mr. Rams, and a various country with ſome good corn in it. Flat lands by the coaſt let very high, and mountain at 6s. or 7s. an acre, and ſome at 8s. or 10s. Paſſed to Wicklow, prettily ſituated on the ſea, and from Newrybridge walked to ſee Mr. Tye's, which is a neat farm well wooded, with a river running through the fields.

Reached

Reached in the evening Mount Kennedy, the ſeat of Gen. Cunninghame, who fortunately proved to me an inſtructor as aſſiduous as he is able. He is in the midſt of a country almoſt all his own, for he has 10,000 Iriſh acres here. His domain, and the grounds about it, are very beautiful, not a level can be ſeen; every ſpot is toſſed about in a variety of hill and dale. In the middle of the lawn is one of the greateſt natural curioſities in the kingdom; an immenſe arbutus tree unfortunately blown down, but yet vegetating, one branch, which parts from the body near the ground, and afterwards divides into many large branches, is 6 feet 2 inches in circumference. The general buried part of the ſtem as it laid, and it is from ſeveral branches throwing out fine young ſhoots: it is a moſt venerable remnant. Killarney, the region of the Arbutus, boaſts of no ſuch tree as this.

July 16th, rode in the morning to Drum; a large extent of mountains, and wood, on the general's eſtate. It is a very noble ſcenery; a vaſt rocky glen; one ſide bare rocks to an immenſe height, hanging in a thouſand whimſical, yet frightful, forms, with vaſt fragments tumbled from them, and lying in romantic confuſion; the other a fine mountain ſide covered with ſhrubby wood. This wild paſs leads to the bottom of an amphitheatre of mountain, which exhibits a very noble ſcenery. To the right is an immenſe ſweep of mountain completely wooded, taken as a ſingle object it is a moſt magnificent one, but

but its forms are pictureſque in the higheſt degree; great projections of hill, with glens behind all wooded, have a noble effect. Every feature of the whole view is great, and unites to form a ſcene of natural magnificence. From hence a riding is cut through the hanging wood, which riſes to a central ſpot, where the general has cleared away the rubbiſh from under the wood, and made a beautiful waving lawn with many oaks and hollies ſcattered about it; here he has built a cottage, a pretty whimſical oval room, from the windows of which are three views, one of diſtant rich lands opening to the ſea, one upon a great mountain, and a third upon a part of the lawn. It is well placed and forms upon the whole a moſt agreeable retreat. The following particulars of agriculture I had from General Cunninghame, who took every means of having me well informed.

About Mount Kennedy the country is incloſed within various mountains and high lands; farms are generally very ſmall, from 20 acres to 100, except in mountainous tracts, where they are larger, ſome from 300 to 600 acres. The ſoil is in general a dry ſound gravel, hanging to the ſouth eaſt, and protected by mountains from the north weſt. The rent, on an average, from 30s. to 50s. not mountain, which is uſually 8s. or 10s. The ſkirt of the whole county, from the mountain down to the ſea, is from 30s. to 50s. an acre, being a ſixth of it. One third of it, uncultivated and uninhabited, lets for not more than 6d. an

an acre. Another third lets for 20s. The remaining ſixth at 9s.—Average of the whole 15s. an acre.

The courſes of crops are: 1. Potatoes; all the dung of the country uſed for them. 2. Wheat; ſow one barrel, and get on an average 8 barrels.——All the furrows ſhovelled. 3. Oats; ſow near 2, and get 10 barrels. 4. Oats. 5. Barley; ſow ½ and get 10, and then leave it for lay for 5 years, never ſowing any graſs ſeeds. It produces nothing at all for three years, but after that white clover comes ſlowly.

Barley has been more cultivated upon account of the quantity of ale and beer which is brewed here, being the common beverage through the county, and more famous for it than any other. The barrel, 2-thirds of a hogſhead, ſells at 40s. Malt malted here 14s. a barrel; the barley 10s. 6d.

Another courſe: 1. Marle, or lime-ſtone gravel, on the lay, 1600 loads an acre, and ſow barley. 2. Wheat. 3. Oats or barley. 4. Oats or ditto, till left to lay again. Gravelling they generally conſider as a right to ſix or eight crops. Their wheat after potatoes they ſow ſo late as Chriſtmas.

Very few peaſe, and no beans, nor any rape; and not a turnip, though ſaw great tracts perfectly adopted to that crop. They ſow alſo very little of flax, having no ſuch manufacture.

manufacture. Their potatoes they univerſally plant on an old lay; they ſpread their dung in beds for the trenching way, none under the plough. Plant 8 to 10 barrels on an acre, laid at 6 inches from one another. When the plants are about an inch or two high, they cover them a ſecond time from the trenches. They hand weed them. No hiring land of farmers for it, but all on their own account.

There are many copſes on the ſides of mountains of birch, oak, aſh, and holly, which are cut generally at 25 years growth for poles for building cabbins; the bark for tan, and the ſmaller branches for charcoal. They are worth from 12l. to 25l. an acre. Many of them on very ſteep ſides of mountains, and to a great height; but no great oak woods, ſince the Shillaly woods were cut down about 12 years ago.

There are conſiderable tracts of mountain land improved; if dry heath land, they plough, croſs plough, burn, and then ſow rye, getting 8 barrels, after which they have oats, and crop it as long as it will produce. Unimproved mountain, conſiſting of rock, furze, *(ulex europæus)* fern, *(pteris aquilina)* &c. but dry, lets at 8s. an acre, at which rent they have it for 31 years. The improvement is reckoned very profitable. No folding ſheep: there is not ſuch a thing as a hurdle known. They pare and burn the mountain as the only way

way to improve, though contrary to an abſurd act of parliament againſt it.

Lime they uſe in very ſmall quantities, and no wonder, for it is the Sutton ſtone they bring from the hill of Howth to Wicklow, where it is burnt, and the common farmers bring it from thence at the expenſe of 2s. 6d. the ſtatute barrel of 32 gallons. They lay from 20 to 60 on an acre, chiefly on mountain ground. Grey marle, with lime-ſtone gravel in ſtrata, abound all over the country, with other ſtrata of ſand, all which have an effervescence with acids, and in digging they mix together, and prove of infinite benefit to their fields.

Very few dairies, ſo that they make ſcarce any butter. Their cows are ſubſervient to their lamb ſuckling, and leave them free only in ſummer, when they fat calves for Dublin market. Four or five quarts of milk at a meal is the common quantity. In the winter they have hay, but only in hard weather. No grazing of oxen. As to ſheep their ſyſtem is particular; it is all ſuckling lambs for Dublin market.

General Cunninghame carried me to a farmer who is reckoned the moſt able in that buſineſs of any in the country, and the following is the account he gave me of his management. He breeds his own lambs, from a ſtock partly bought in every year. The rams he puts to the ewes the middle of May, in order

order to have them lamb at Michaelmas, or a little after. They are left in the field for a week, and then taken into the houſe. The ewes are brought to ſuckle them twice a day in general; but three or four times, while young; they have cows milk given them by women from their mouths, ſquirted down the lambs throats, to the quantity of a *noggin* a day at firſt, and riſes to 1½ and 2. A noggin is one-eighth of a quart. They keep them till three weeks before Chriſtmas, and then begin to ſell them. Their ewes are kept on graſs only, unleſs in bad weather, when they have hay. He ſells 75 lambs annually, from a ſtock of 80 rams and ewes, at 33s. on an average, ſome up to 40s. for theſe lambs he has 8 cows, 5 of them in full milk, and if he has not cows enough, buys in for the purpoſe. The ewes are bought in at 9s. each in July, and ſome old ones are ſold every year at 6s. 14 acres of graſs will keep 80 ſheep until the ſtubbles are ready for them.

In this ſyſtem much depends on having them take the ram in proper time for the Dublin market. In order to accompliſh this ſeemingly difficult buſineſs, they treat the ladies with a cup of generous Wicklow ale, and drive them about the field, in order to create the proper ferment between their blood and the ale, and then at the critical moment let in the gentlemen. Some managers more attentive than common, treat them with claret inſtead of ale: perhaps the ſwarms of children in

in the cabbins are owing to the prolific quality of this excellent ale of Wicklow.

The wool of the country is all wrought up by the inhabitants, ſpun, combed, and wove into flannel and frizes, and to ſuch an extent, that the mountain farmers pay half their rents by this manufacture. They alſo buy much, not having enough of their own: it is all done by the ſmalleſt farmers going through the whole manufacture employing cotters in it. By ſpinning, a woman can earn 3d. a day. Wool now 14s. to 17s. the ſtone of 16lb. 20 years ago 11s. no rot among the ſheep. On the mountains many goats are kept for the milk, which is drank very much by people from Dublin, who take lodgings for drinking goats whey. Kids fleſh reckoned very fine.

They plough with both horſes and bullocks: two horſes and two bullocks, and one bullock and three horſes, and do from one-half to three-fourths of an acre a day. Stir 5 inches deep. Very few or no oats given to horſes. Chaff all thrown away. They work their draught oxen in winter on ſtraw. Hire of a car, a horſe, and a driver, 1s. 6d. a day. With 4 cows, 2 horſes, a yearling, and 20 ſheep, General Cunninghame has had tenants profeſſedly take 50 acres of land.

Land ſells at rack rent for 18 to 21 years purchaſe; 5 or 6 years ago it was at 22. Rents are fallen in the ſame time 4s. in the pound. Tythes are paid by compoſition; the crops are

are viewed, and they agree for one year. An acre of wheat 10s. Barley 4s. Oats 4s. No tea in the cabbins on the mountains, but in the towns they have it. Leaſes are three lives, or 31 years; a vaſt proportion re-let 3 or 4 deep. The people increaſe much. Rent of a cabbin in a village, with a very ſmall garden, 2l. 2s. to 3l. if not in a village it is leſs. On a mountain 50s. to 3l. for a cabbin and 5 acres, but generally have a common paſture for their cows, &c. Farms much taken in the mountains by partnerſhip; 3 or 4 will take 100 acres, and divide among themſelves as in Kilkenny. Lower people all Roman Catholics. No emigrations. No white boys.

They have plenty of potatoes; all keep a cow, ſome more; all a pig or more, and poultry of every kind. Their fuel is turf from the mountains, they are univerſal pilferers of every thing they can lay their hands on: great lyars, but full of quickneſs and ſagacity, and grateful to exceſs.

Kiſh of turf 10d. delivered. Oak *ribberies* (ſpars) for cabbins 4s. 6d. a dozen. Building a cabbin 25 feet long, 14 feet wide, with a door and two windows, 5l. 10s. Ditto ſtone and ſlate 20l. Ditto farm houſe and offices for 50 acres, of ſtone and ſlate 200l.

Expenſes and produce of General Cunninghame's farm.

Rent	£. 375	0	9
Labour	150	0	0
Wear and tear	30	0	0
	£. 555	0	0

48 acres mown, at 10 loads an acre, at 10s.	£.	240	0 0
5 acres of wheat 10 barrels, at 1l. 1s.		52	10 0
10 — barley 14 ditto, at 10s. 6d.		73	10 0
17 — oats 13 ditto, at 10s.		110	10 0
2 — peaſe 9 ditto, at 10s.		9	0 0
10 — ſundries, at 5l.		50	0 0
70 ſheep at 15s		52	10 0
Swine		5	0 0
10 young cattle 40s.		20	0 0
16 horſes, 36 weeks, at 2s. 6d.		72	0 0
5 oxen, ditto 2s. 6d.		22	10 0
	£.	707	10 0

In two acres of land ſummer-fallowed for wheat, the general was perſuaded not to ſow it, as the red-worm would infallibly deſtroy the crop, he therefore kept it for barley, but manured it with lime, 90 barrels an acre at 21d½ each, from the hill of Howth in Auguſt; the barley was eaten notwithſtanding the lime; it was a very poor crop, and in ſome places none at all. Sowed the ſtubble with peaſe, which I ſaw, and were very fine. The general tried a very extraordinary experiment upon breaking up an old moſſy graſs lay in an orchard, and laying it down again without having any corn: it was manured with plenty of ſand, then ploughed it up in Auguſt; directly croſs-ploughed it; harrowed it thoroughly, and threw about 20 barrels of lime an acre; burnt the roots, weeds, and tufts of graſs, ſpread the aſhes, harrowed it, and upon that, about the beginning of September, ſowed hay ſeeds. This was done to eſcape the trouble of a courſe

a courſe of tillage among trees. The ſucceſs was as great as poſſible; I ſaw the crop of hay mown, and it is not leſs than 16 loads an acre. This is a ſyſtem which in many caſes would be of the greateſt uſe in reviving old hide-bound paſtures without the trouble of a courſe of tillage. It ſhould, however, be obſerved, that the climate of Ireland is peculiarly favourable to laying land to graſs at that ſeaſon, for it grows luxuriantly quite till Chriſtmas.

Another inſtance of this natural tendency of the ſoil to graſs, is a trial the general accidentally made. He had a ſmall field under turnips, which he hoed well, and were a fine crop; upon being drawn to feed the plough bullocks with, he found much graſs upon the land, ſo much, that it induced him to let it ſtand, and the rather as it was laid very flat and ſmooth with the turnips, he rolled in ſome graſs ſeeds, and it turned out a very fine meadow. He was the firſt who ſowed red clover here, and is not yet followed by the farmers. He encouraged his tenants to lime, and lends them money for it. Much land is laid to graſs at Mount Kennedy, and all of it done in a perfect manner, the ſurface laid completely ſmooth, without the leaſt ſign of a furrow, and the graſſes luxuriant; all manured richly with gravel and marle.

I ſaw two large compoſt dunghills turning over and mixing, a ſight not common in Ireland. It pleaſed me more than the ſight of a palace would have done. The general's crops

I found all exceedingly fine, one field of oats the beſt I had ſeen in Ireland.

July 17th.—Took my leave of General Cunninghame, and went through the Glen of the downs in my way to Powerſcourt. The Glen is a paſs between two vaſt ridges of mountains covered with wood, which have a very noble effect, the vale is no wider than to admit the road, a ſmall gurgling river almoſt by its ſide, and narrow ſlips of rocky and ſhrubby ground which parts them: in the front all eſcape ſeems denied by an immenſe conical mountain which riſes out of the Glen, and ſeems to fill it up. The ſcenery is of a moſt magnificent character. On the top of the ridge to the right Mr. La Touche has a banqueting room. Paſſing from this ſublime ſcene, the road leads through chearful grounds all under corn, riſing and falling to the eye, and then to a vale of charming verdure broken into inclofures, and bounded by two rocky mountains, diſtant darker mountains filling up the ſcene in front: this whole ride is intereſting, for within a mile and an half of Tinnyhinch (the inn to which I was directed) you come to a delicious view on the right, a ſmall vale opening to the ſea, bounded by mountains, whoſe dark ſhade forms a perfect contraſt to the extreme beauty and lively verdure of the lower ſcene, conſiſting of gently ſwelling lawns riſing from each other, with groups of trees between, and the whole ſo prettily ſcattered with white farms, as to add every idea of chearfulneſs. Kept on towards Powerſcourt, which preſently came

in

in view from the edge of a declivity. You look full upon the houſe, which appears to be in the moſt beautiful ſituation in the world, on the ſide of a mountain, half way between its bare top, and an irriguous vale at its foot. In front, and ſpreading among woods on either ſide, is a lawn whoſe ſurface is beautifully varied in gentle declivities, hanging to a winding river.

Lowering the hill the ſcenery is yet more agreeable, the near incloſures are margined with trees, through whoſe open branches are ſeen whole fields of the moſt lively verdure. The trees gather into groups, and the lawn ſwells into gentle inequalities, while the river winding beneath renders the whole truly pleaſing.

Breakfaſted at the inn at Tinnyhinch, and then drove to the park to ſee the water-fall. The park itſelf is fine; you enter it between two vaſt maſſes of mountain, covered with wood, forming a vale ſcattered with trees, through which flows a river on a broken rocky channel: you follow this vale till it is loſt in a moſt uncommon manner, the ridges of mountain cloſing, form one great amphitheatre of wood, from the top of which, at the height of many hundred feet, burſts the water from a rock, and tumbling down the ſide of a very large one, forms a ſcene ſingularly beautiful. At the bottom is a ſpot of velvet turf, from which riſes a clump of oaks, and through their ſtems, branches, and leaves, the falling water

is

is ſeen as a back ground with an effect more picturesque than can be well imagined; theſe few trees, and this little lawn, give the finiſhing to the ſcene. The water falls behind ſome large fragments of rock, and turns to the left, down a ſtony channel, under the ſhade of a wood.

Returning to Tinnyhinch, I went to Inniſkerry, and gained by this detour in my return to go to the Dargle, a beautiful view which I ſhould otherwiſe have loſt; the road runs on the edge of a declivity, from whence there is a moſt pleaſing proſpect of the river's courſe through the vale, and the wood of Powerscourt, which here appear in large maſſes of dark ſhade, the whole bounded by mountains. Turn to the left into the private road that leads to the Dargle, and preſently gives a ſpecimen of what is to be expected by a romantic glen of wood, where the high lands almoſt lock into each other, and leave ſcarce a paſſage for the river at bottom, which rages, as if with difficulty forcing its way. It is topped by a high mountain, and in front you catch a beautiful plat of incloſures bounded by the ſea. Enter the Dargle, which is the name of a Glen near a mile long. Come preſently to one of the fineſt ranges of wood I have any where ſeen: it is a narrow glen or vale formed by the ſides of two oppoſite mountains; the whole thickly ſpread with oak wood, at the bottom (and the depth is immenſe), it is narrowed to the mere channel of the river, which rather tumbles from rock to rock than runs.

runs. The extent of wood that hangs to the eye in every direction is great, the depth of the precipice on which you ſtand immenſe, which with the roar of the water at bottom forms a ſcene truly intereſting. In leſs than a quarter of a mile, the road paſſing through the wood leads to another point of view to the right. It is the crown of a vaſt projecting rock, from which you look down a precipice abſolutely perpendicular, and many hundred feet deep upon the torrent at the bottom, which finds its noiſy way over large fragments of rock. The point of view is a great projection of the mountain on this ſide, anſwered by a concave of the oppoſite, ſo that you command the Glen both to the right and left: it exhibits on both, immenſe ſheets of foreſt, which have a moſt magnificent appearance. Beyond the wood, to the right, are ſome incloſures hanging on the ſide of a hill, crowned by a mountain. I know not how to leave ſo intereſting a ſpot, the impreſſions raiſed by it are ſtrong. The ſolemnity of ſuch an extent of wood unbroken by any intervening objects, and the whole hanging over declivities is alone great; but to this the addition of a conſtant roar of falling water, either quite hid, or ſo far below as to be ſeen but obſcurely united to make thoſe impreſſions ſtronger. No contradictory emotions are raiſed — no ill-judged temples appear to *enliven* a ſcene that is gloomy, rather than gay. Falling or moving water is a lively object; but this being obſcure, the noiſe operates differently. Following the road a little further, there is another

bold

bold rocky projection from which alſo, there is a double view to the right and left. In front ſo immenſe a ſweep of hanging wood, that a nobler ſcene can hardly be imagined: the river, as before, at the bottom of the precipice, which is ſo ſteep and the depth ſo great, as to be quite fearful to look down. This horrid precipice, the pointed bleak mountains in view, with the roar of the water, all conſpire to raiſe one great emotion of the ſublime. You advance ſcarcely 20 yards before a pretty ſcene opens to the left, a diſtant landſcape of incloſures, with a river winding between the hills to the ſea. Paſſing to the right, freſh ſcenes of wood appear; half way to the bottom, one different from the preceding is ſeen; you are almoſt incloſed in wood, and look to the right through ſome low oaks on the oppoſite bank of wood, with an edging of trees through which the ſky is ſeen, which added to an uncommon elegance in the outline of the hill, has a moſt pleaſing effect. Winding down to a thatched bench on a rocky point, you look upon an uncommon ſcene. Immediately beneath is a vaſt chaſm in the rock, which ſeems torn aſunder, to let the torrent through that comes tumbling over a rocky bed far ſunk in a channel emboſomed in wood. Above is a range of gloomy obſcure woods, which half overſhadow it, and riſing to a vaſt height, exclude every object. To the left the water rolls away over broken rocks: a ſcene truly romantic. Followed the path: it led me to the water's edge, at the bottom of the Glen, where is a new ſcene, in which not a

ſingle

ſingle circumſtance hurts the principal character. In a hollow formed of rock and wood (every object excluded but thoſe and water) the torrent breaks forth from fragments of rock, and tumbles through the chaſm, rocks bulging over it, as if ready to fall into the channel, and ſtop the impetuous water. The ſhade is ſo thick as to exclude the heavens, all is retired and gloomy, a brown horror breathing over the whole. It is a ſpot for melancholy to muſe in.

Return to the carriage, and quit the Dargle, which upon the whole is a very ſingular place, different from all I have ſeen in England, and, I think, preferable to moſt. Croſs a murmuring ſtream clear as chryſtal, and riſing a hill, look back on a pleaſing landſcape of incloſures, which waving over hills, end in mountains of a very noble character. Reach Dublin.

July 18th, once more to Lord Harcourt's at St. Woolſtan's, where I was ſo fortunate as to meet Colonel Burton: he gave me a freſh packet of recommendations into the north of Ireland, and taking my leave of his excellency, paſſed Manooth to Kilrue. From Cellbridge to Manooth is a line of very fine corn. Paſſed Dunboyne, from thence to Kilrue; the ſoil is clay, flat and ſtrong, and I obſerved much hollow draining going on, with very fine crops of wheat and oats. The land about Mr. Jones is very fine rich ſtrong loam, called here clay.

Mr.

Mr. Lowther, to whom I had a letter, not being at home, I was forced to take refuge in a cabbin, called an inn, at Ratoath. Preſerve me, fates! from ſuch another.

In their ſtrong lands about Kilrue their courſes are:—1. Fallow. 2. Wheat, yielding 8 to 15 barrels an acre. 3. Oats, 9 to 20 barrels.

1. Potatoes 80 barrels.	1. Potatoes.
2. Beans 7 to 15.	2. Barley 9 to 14.
3. Oats.	3. Oats.

Limeſtone gravel they uſe in great quantities; lay it on a fallow, and it laſts 7 years, the expenſe from 4l. to 8l. Lime they alſo have, but find that it will not laſt like gravel. Hollow, called *French* drains, are very general, even among the common farmers: ſome done with ſtones, but much with ſods, laid an edge in the ground, they dig them 2½ or 3 feet deep, at two feet and an half, the expenſe is 5d. a perch. At 3 feet it is 8d. Clover they ſow pretty much, let it lie two years, and then break it up for oats on one ploughing. They ſow it on both winter and ſpring corn. The poor give 5l. 5s. an acre for lay to plant potatoes on, and the ſame for ſtubbled ground dunged. A cabbin and half an acre of land 30s. rent, and 30s. more for a cow's feed. Farms riſe to 300 acres, and rents from 18s. to 25s. an acre.

July 19th, left Ratoath, paſſing Robert's-town, found much of the land a ſtrong loam without

without ſtones, with all the appearance of being a very fine ſoil. Got to Baron Hamilton's at Hampton, near Balbriggen, by breakfaſt. His houſe is new built, and ſtands agreeably by a fine ſhore, with a full view of the mountains of Mourn, at 16 leagues diſtance, and the iſles of Skerry near him, much improving his view. He favoured me with the following account.

About Hampton, the ſoil clay or ſtrong loam, and many ſtones in it; lets from 20s. to 30s. Farms riſe from 40 acres to 100 and 150. No taking in partnerſhip. Courſes:

1. Fallow. 2. Wheat, 7 barrrels. 3. Barley, 10 to 12. 4. Oats, 10.

1. Fallow. 2. Wheat. 3. Barley. 4. White peaſe.

1. Fallow. 2. Wheat. 3. Barley. 4. Oats. 5 Clover for 2 years. 6. Wheat or fallow.

The manures lime, ſea-ſand, marle, and lime-ſtone gravel got three feet deep. Lime 6d. to 8d at the kiln; they lay from 100 to 150 barrels, which laſt 8 or 9 years; on the dry ſoils beſt. On clay well drained, they ſpread of lime-ſtone gravel, that has a ſtrong fermentation, 300 to 400 loads, generally out of drains, ditches, &c. draining their lands at the ſame time; laſts long, and is beſt on ſtrong land. Sea ſand on poor clay excellent; lay 300 barrels an acre, which is a good dreſſing; laſts many years, and changes it from ſcutch *(triticum repens)* to white clover; it has an effervescence with acids. The marle white under

under black bottoms; 300 loads an acre. On new lays the Baron has found a very fine effect from it. Flax chiefly after potatoes, and then barley. Sow enough for their own uſe, not enough for manufactures for ſale. For potatoes 4l. an acre for dunged land, or lay on dung and have it for nothing. Much French draining, 4 feet deep, and 5 inches at bottom; fill with ſtones, and the improvement found very great; the common farmers do much of it. Tillage moſtly with horſes. In hiring farms they will take 100 acres with 200l. Tythes are generally compounded. The Baron has 800l. a year in tythes, and they pay upon an average 2s. an acre. If diſtinguiſhed, wheat is 8s. or 9s. Barley 8s. Oats 5s. Peaſe 4s. Meadow 4s. 6d. Many lands are hired to be relet. Population encreaſes very faſt, and the country in every reſpect improves amazingly. A cottage and half an acre 40s. to 3l. for a cow 30s. generally have 2 cows. A belly full of potatoes and oatmeal for *ſtir-about*; keep 2 or 3 pigs, and a great deal of poultry. They are univerſally much better off in every reſpect than 20 years ago. More induſtrious, owing perhaps very much to the high rents; inſomuch that they have been the parent of all improvements. All the manures have been found out within 20 years. Lime has not been uſed more than 10 years. When Baron Hamilton built the pier at Balbriggen, in the year 1763, there was only one ſloop of culm for burning lime in a ſeaſon, but now from 60 to 100.

Cattle

Cattle of all ſorts a very inferior object here. This place is in Fingal, which is a territory from near Dublin, extending along the coaſt, inhabited by a people they call Fingalians; an Engliſh colony planted here many years ago, ſpeaking nearly the ſame language as the barony of Forth, but more intermixed with Iriſh in language, &c. from vicinity to the capital.

A horſe and car and driver 1s. two cars to a driver. The riſe of labour great, 20 years, from 4d. to 6d. An extraordinary circumſtance is, that Ireland has been very proſperous on compariſon with former times, and yet intereſt of money now 6 per cent. and 20 years ago 4½ and 5. Land ſells at under 20 years purchaſe, fallen from 24 in 4 or 5 years, owing partly to the rents being run up too high.

Baron Hamilton has been a conſiderable improver; he took in near Hampton 150 acres mountain land, covered with ſcutch graſs *(triticum repens)* furz, *(ulex europæus)* and a little heath *(erica vulgaris)*; ſtubbed it up, ploughed it 4 times, limed it 140 to 150 barrels each acre. Sowed rye, ſold it on the land 7l. 10s. an acre. For two ſucceſſive years let it at 4l. 10s. an acre for two crops of oats, which yielded from 16 to 20 barrels an acre; then two years more at 3l. 15s. and 3l. 10s. the crop 14 barrels. Fallowed it to deſtroy ſcutch graſs for maſlin, and then a crop of ſpring corn with graſs ſeed. This is the courſe in which the rough ground has been generally improved.

improved. This ſoil clay without much ſtone. In its rough ſtate worth only 5s. an acre to remain ſo, but the Baron paid 16s. 6d. The firſt year's expenſe was, crop included, 10l. an acre, now worth 20s. to 28s. an acre.

The Baron carried me to Balbriggen, a little ſea port of his, which owes its being to his care and attention. It ſubſiſts by its fiſhing boats, which he builds; has 23 of them, each carrying 7 men, who are not paid wages, but divide the produce of their fiſhery. The veſſel takes one ſhare, and the hands one each, which amounts on an average to 16s. a week. A boat coſts from 130l. to 200l. fitted out ready for the fiſhery: they make their own nets. The port owes its exiſtence to a very fine pier which Baron Hamilton built, within which ſhips of 200 tons can lay their broad ſides, and unload in the quay. Such veſſels bring coals and culm from Wales, &c. The baſe of the pier is 18 feet thick, and on the outſide is a conſiderable rampart of great fragments of rock, ſunk to defend the pier againſt the waves. In moving theſe huge ſtones, ſome of which weigh 8 or 10 ton, the Baron made uſe of a contrivance which deſerves to be generally known. They are ſpread along the ſhore, between high and low water mark, but to get them to the place where wanted was a very difficult buſineſs. He laſhed puncheons to them at low water, which floated them when the tide came in, and conveyed them over the ſpot where wanted; but in diſengaging the caſks from the ſtone to ſink the latter, he often had

had them broken, and found many difficulties. To remedy this, he had a contrivance very ſimple and ingenious, which anſwered the purpoſe completely. The puncheons were hooped ſtrongly with iron near each end, and between theſe irons was a chain, from the centre of which went an iron tongue. The ſtones, at low water, were laſhed round with a chain with open irons that correſponded with thoſe tongues in the caſk chains, the one went into the other, and when cloſed had a female ſcrew through all three; through the two jaws of the one, and the tongue of the other, a male ſcrew at the end of a bar was then ſcrewed in when the ſtone was ready to move. One of 8 tons required 10 puncheons upon being floated over the ſpot where wanted; theſe bars were unſcrewed, and the ſtone and caſks diſengaged at once without trouble, the one ſinking, and the caſks floating away with the chain that was laſhed round the ſtone.

Left Balbriggen and went to Bally-garth, the ſeat of —— Pepper, Eſq; a place very agreeably wooded on a riſing ground above a river.

Mr. Pepper keeps a conſiderable domain in his hands, and has practiced ſeveral parts of huſbandry with much attention; he has laid down large tracts to graſs, which he has made ſo good that he could let it readily for 50s. to 3l. an acre. His courſe of crops has been ſometimes, 1. Turnips. 2. Barley. 3. Clover. 4. Wheat; and has cultivated turnips in conſiderable

ſiderable quantities. In ſeveral particulars, which I ſaw myſelf, Mr. Pepper appears an excellent farmer. His quick fences were in perfect order; his wet lands hollow drained, and the mouths of the drains well faced with ſtone. The old ditch earth on the borders of his fields was carting away to form compoſts; he did it by contract, the men digging and leading it from 20 to 30 perches, driving and finding horſes and cars at 5d. a ſcore loads, each a barrel. This is much *againſt* the Iriſh cars, for 4 horſes carry but 16 buſhels of earth, whereas 3 in an Engliſh cart would carry double that. Mr. Pepper is much a friend to them for ſome things, but in others thinks that two horſe carts are preferable; with 2 horſes in a well made cart, he ſends 10 barrels to Dublin, whereas 2 horſes in 2 cars carry but 5 or 6 barrels, which is a great inferiority; but he likes the little one horſe cart better ſtill, which brings him 3 barrels of coals, lime, &c. A circumſtance in the fattening of cattle, in which he is peculiar, is, not letting his bulls go among his fattening cows; he never does this, and finds that they fat as well without as with it. In breeding ſheep he is attentive, finding it a profitable branch of farming. He keeps his lambs till they are 2-year-old wethers, and ſells them in ſpring at 35s. each on an average; but could not do it without the aſſiſtance of turnips. His ewes clip 8lb. of wool, and his lambs 7lb. 20 acres of graſs will carry 100 through the year, except the turnip ſeaſon. Sea ſand Mr. Pepper ſpreads on his clay meadows, and finds the benefit of it very great.

In

In converſation on the common people, Mr. Pepper aſſured me he never found them more diſhoneſt than in other countries. They would thieve ſlightly till they found him reſolute in puniſhing all he diſcovered; even his turnips have ſuffered very little depredation.

July 20th, to Drogheda, a well built town, active in trade, the Boyne bringing ſhips to it. It was market day, and I found the quantity of corn, &c. and the number of people aſſembled very great; few country markets in England more thronged. The Rev. Mr. Neſbit, to whom recommended, abſent, which was a great loſs to me, as I had ſeveral enquiries which remained unſatisfied.

To the field of battle on the Boyne.—The view of the ſcene from a riſing ground which looks down upon it is exceedingly beautiful, being one of the completeſt landſcapes I have ſeen. It is a vale, looſing itſelf in front between bold declivities, above which are ſome thick woods, and diſtant country. Through the vale the river winds and forms an iſland, the point of which is tufted with trees in the prettieſt manner imaginable; on the other ſide a rich ſcenery of wood, among which is Doctor Norris's houſe. To the right on a riſing ground on the banks of the river is the obeliſk, backed by a very bold declivity; purſued the road till near it, quitted my chaiſe, and walked to the foot of it. It is founded on a rock which riſes boldly from the river. It is a no-

ble pillar, and admirably placed. I ſeated myſelf on the oppoſite rock, and indulged the emotions which with a melancholy not unpleaſing filled my boſom, while I reflected on the conſequences that had ſprung from the victory here obtained. Liberty was then triumphant. May the virtues of our poſterity ſecure that prize which the bravery of their anceſtors won! Peace to the memory of the Prince to whom, whatever might be his failings, we owed that day memorable in the annals of Europe!

Returned part of the way, and took the road to Cullen, where the Lord Chief Baron Forſter received me in the moſt obliging manner, and gave me a variety of information uncommonly valuable. He has made the greateſt improvements I have any where met with. The whole country 22 years ago was a waſte ſheep walk, covered chiefly with heath, with ſome dwarf furz and fern. The cabbins and people as miſerable as can be conceived; not a proteſtant in the country, nor a road paſſable for a carriage. In a word, perfectly reſembling other mountainous tracts, and the whole yielding a rent of not more than from 3s. to 4s. an acre. Mr. Forſter could not bear ſo barren a property, and determined to attempt the improvement of an eſtate of 5000 acres till then deemed irreclaimable. He encouraged the tenants by every ſpecies of perſuaſion and expenſe, but they had ſo ill an opinion of the land that he was forced to begin

gin with 2 or 3000 acres in his own hands; he did not, however, turn out the people, but kept them in to ſee the effect of his operations.

Theſe were of a magnitude I have never heard before: he had for ſeveral years 27 lime-kilns burning ſtone, which was brought four miles with culm from Milford Haven. He had 450 cars employed by theſe kilns, and paid 700l. a year for culm: the ſtone was quarried by from 60 to 80 men regularly at that work; this was doing the buſineſs with imcomparable ſpirit—yet had he no peculiar advantages, but many circumſtances againſt him, among which his conſtant attendance on the courts, which enabled him to ſee Cullen but by ſtarts, was not the leaſt. The works were neceſſarily left to others at a time that he could have wiſhed conſtantly to have attended them.

While this vaſt buſineſs of liming was going forwards, roads were alſo making, and the whole tract incloſed in fields of about 10 acres each, with ditches 7 feet wide, and 6 deep, at 1s. a perch, the banks planted with quick and foreſt trees. Of theſe fences 70,000 perches were done.

In order to create a new race of tenants, he fixed upon the moſt active and induſtrious labourers, bought them cows, &c. and advanced money to begin with little farms, leaving them to pay it as they could. Theſe men he

nurſed up in proportion to their induſtry, and ſome of them are now good farmers, with 4 or 500l. each in their pockets. He dictated to them what they ſhould do with their lands, promiſing to pay the loſs, if any ſhould happen, while all the advantage would be their own. They obeyed him implicitly, and he never had a demand for a ſhilling loſs.

He fixed a colony of French and Engliſh Proteſtants on the land, which have flouriſhed greatly. In Cullen are 50 families of tradeſmen, among whom ſobriety and induſtry are perfectly eſtabliſhed.

Many of theſe lands being very wet, draining was a conſiderable operation: this he did very effectually, burying in the drains ſeveral millions of loads of ſtones.

The mode in which the chief baron carried on the improvement, was by fallowing. He ſtubbed the furze, &c. and ploughed it, upon which he ſpread from 140 to 170 barrels of lime per acre, proportioning the quantity to the mould or clay which the plough turned up. For experiment he tried as far as 300 barrels, and always found that the greater the quantity, the greater the improvement. The lime coſt him 9d. a barrel on the land: his uſual quantity 160, at the expenſe of 6l. an acre, and the total of that expenſe alone thirty thouſand pounds! After the liming, fallowed the land for rye, and after the rye took two crops

crops of oats. Throughout the improvement, the lime has been ſo exceedingly beneficial that he attributes his ſucceſs principally to the uſe of it. Without it, all other circumſtances equal, he has got 3 or 4 barrels an acre of oats, but with it 20 and 22 of barley. Has compared lime and white marle on an improved mountain-ſoil for flax, that on the lime produced 1000 lb. well ſcutched, the other 300 lb.

His great object was to ſhew the tenantry as ſoon as he could, what theſe improvements would do in corn, in order to ſet them to work themſelves. He ſold them the corn crops on the ground at 40s. an acre: the three crops paid him therefore the expenſe of the liming, at the ſame time they were profitable bargains to the tenants. With the third corn-crop the land was laid down to graſs. Upon this operation, after the manuring, ditching and draining, the old tenants very readily hired them. Some ſeeing the benefit of the works, executed them upon their own lands; but their landlord advanced all the money, and truſted to their ſucceſs and honeſty for the payment. This change of their ſentiments induced him to build new farm-houſes, of which he has erected above 30, all of lime and ſtone, at the expenſe of above 40l. a houſe; the farms are in general about 80 acres each.

After ſix or ſeven years, the chief baron limed much of it a ſecond time on the ſod, and the benefit of it very great. It is all let now on

on an average at 20s. an acre. Upon the whole, his Lordſhip is clearly of opinion that the improvement has been exceedingly profitable to him, beſides the pleaſure that has attended ſo uncommon a creation. He would recommend a ſimilar undertaking to others who poſſeſs waſtes, and if he had ſuch another eſtate he would undertake it himſelf.

He alſo allotted a conſiderable tract of many acres for plantations, which are well placed and flouriſhing. Ridings are cut in them, and they form a very agreeable ſcenery. Mr. Forſter, his ſon, takes much pleaſure in adding to them, and has introduced 1700 ſorts of European and American plants. The country is now a ſheet of corn: a greater improvement I have not heard of, or one which did more genuine honour to the perſon that undertook it.

THIS GREAT IMPROVER, a title more deſerving eſtimation than that of a great general or a great miniſter, lives now to overlook a country flouriſhing only from his exertions. He has made a barren wilderneſs ſmile with cultivation, planted it with people, and made thoſe people happy. Such are the men to whom monarchs ſhould decree their honours, and nations erect their ſtatues.

Some other circumſtances I learnt from his Lordſhip were: more than half the county of Louth, which is one of the beſt in Ireland for tillage,

tillage, is every year under corn, 25 years ago, it was all at 10s. an acre, now 21s. *Corn-acre* rents, 40 years ago, were 25s.—25 years ago 30s.—now 3l. 12s. Conjectures one family to every 10 acres in the county, excluſive of towns: found this by obſerving generally four families to every farm of 40 acres.

The general courſe of crops in Louth is: 1. Fallow. 2. Wheat, the produce 6 barrels. 3. Oats, ditto 15 barrels. 4. Barley, ditto 15 barrels. 5. Oats. 6. Graſs ſeeds ſown, or left waſte to turf itſelf.

In his Lordſhip's circuits through the north of Ireland he was, upon all occaſions, attentive to procure information relative to the linen manufacture.

It has been his general obſervation, that where the linen manufacture ſpreads the tillage is very bad. Thirty years ago the export of linen and yarn about 500,000l. a year; now 1,200,000l. to 1,500,000l. The chief baron has taken ſome pains to compare the linen and woollen manufactory for Ireland, and found from the cloſeſt inſpection that the people employed in the linen earned one-third more than thoſe in the woollen. One ſtone of wool is the produce of an acre of graſs, which feeds two and an half, or three ſheep. Raw, it is equal to one-third of the manufactured value, and at 10s. is only 1l. 10s. groſs produce. An acre of flax at 8 cwt. and he has had 12 cwt. wrought

wrought into the worſt linens, will amount to ten times the value of the acre under wool.

Reſpecting the thieving diſpoſition of the common people, which I had heard ſo much of, the Chief Baron was of an entire different opinion—from his own experience he judged them to be remarkably honeſt. In working his improvements, he has lived in his houſe without ſhutters, bolts or bars, and with it half full of *ſpalpeens*, yet never loſt the leaſt trifle—nor has he met with any depredations among his fences or plantations.

Raiſing rents he conſiders as one of the greateſt cauſes of the improvement of Ireland; he has found that upon his own eſtates it has univerſally quickened their induſtry, ſet them to ſearching for manures, and made them in every reſpect better farmers. But this holds only to a certain point; if carried too far, it deadens, inſtead of animating induſtry. He has always preferred his old tenants, and never let a farm by advertiſement to receive propoſals. That the ſyſtem of letting farms to be re-let to lower tenants, was going out very much: it is principally upon the eſtates of abſentees, whoſe agents think only of the moſt rent from the moſt ſolvent tenant.

In converſation upon the popery laws, I expreſſed my ſurpriſe at their ſeverity: he ſaid they were ſevere in the letter, but were never executed. It is rarely or never (he knew no inſtance)

inſtance) that a proteſtant diſcoverer gets a leaſe by proving the lands let under two-thirds of their value to a papiſt. There are ſevere penalties on carrying arms or reading maſs; but the firſt is never executed, for poaching (which I have heard), and as to the other, maſs-houſes are to be ſeen every where: there is one in his own town. His Lordſhip did juſtice to the merits of the Roman Catholics, by obſerving that they were in general a very ſober, honeſt, and induſtrious people. This account of the laws againſt them brought to my mind an admirable expreſſion of Mr. Burke's in the Engliſh houſe of commons, CONNIVANCE IS THE RELAXATION OF SLAVERY, NOT THE DEFINITION OF LIBERTY.

The kingdom more improved in the laſt 20 years than in a century before. The great ſpirit began in 1749 and 1750.

He was aſſured that the emigrations, which made ſo much noiſe in the north of Ireland, were principally idle people, who, far from being miſſed, left the country the better by their abſence. They were generally diſſenters, very few churchmen or catholics.

It is found in that manufacture, that it never flouriſhes when oatmeal is cheap—the greateſt exports of linen are when it is deareſt.

July 21ſt, took my leave of this prince of improvers, who gave me a letter to Mr. For-

ſter

ſter of Roſſy Park; bent my courſe thither, but being from home, went on to Atherdee; and one of the fineſt ſheets of corn I ever beheld is from the hill which looks down on that town. It is a glorious proſpect, all waving hills of wheat as far as the eye can ſee, with the town of Atherdee in a wood in the vale.

To Dundalk, the view down on this town alſo very beautiful, ſwelling hills of a fine verdure, with many rich incloſures backed by a bold outline of mountain that is remarkable. Laid at the Clanbraſſil Arms, and found it a very good inn. The place, like moſt of the Iriſh towns I have been in, full of new buildings, with every mark of increaſing wealth and proſperity. A cambrick manufacture was eſtabliſhed here by parliament, but failed; it was, however, the origin of that more to the north.

July 22d, left Dundalk—Took the road through Ravenſdale to Mr. Forteſcue, to whom I had a letter, but unfortunately he was in the ſouth of Ireland. Here I ſaw many good ſtone and ſlate houſes, and ſome bleach greens; and I was much pleaſed to ſee the incloſures creeping high up the ſides of the mountains ſtoney as they are. Mr. Forteſcue's ſituation is very romantic on the ſide of a mountain, with fine woods hanging on every ſide, with the lawn beautifully ſcattered with trees ſpreading into them, and a pretty

pretty river winding through the vale, beautiful in itſelf, but trebly ſo on information, that before he fixed there, it was all a wild waſte. Rents in Ravenſdale 10s. mountain land 2s. 6d. to 5s. Alſo large tracts rented by villages, the cotters dividing it among themſelves, and making the mountain common for their cattle.

Breakfaſted at Newry, the Globe, another good inn.——This town appears exceedingly flouriſhing, and is very well built; yet 40 years ago, I was told there were nothing but mud cabbins in it: this great riſe has been much owing to the canal to Loch-Neagh. I croſſed it twice—it is indeed a noble work. I was amazed to ſee ſhips of 150 tons and more lying in it, like barges in an Engliſh canal. Here is a conſiderable trade.

Take the road to Market-hill: the town parks about Newry let up to 2l. and 3l. an acre, which is here Engliſh meaſure. They ſow oats chiefly as I advanced, with a little barley—no fallows, and but little clover. Within 4 miles of Market-hill, the courſe:

1. Oats. 2. Oats. 3. Oats. 4. Oats. 5. Oats, and then leave it to the rubbiſh, which comes for 3 or 4 years: ſome potatoes, and after it flax. I am now got into the linen country, and the worſt huſbandry I have met with; my Lord Chief Baron is right. Rents 10s. to 13s. the Engliſh acre; all the farms are

are very ſmall, let to weavers, &c. They meaſure by the boll of 10 buſhels, a good crop of oats three to four and a half.

This road is abominably bad, continually over hills, rough, ſtony, and cut up. It is a turnpike, which in Ireland is a ſynonimous term for a vile road, which is the more extraordinary, as the bye ones are the fineſt in the world. It is the effect of jobs and impoſition which diſgrace the kingdom; the preſentment roads ſhew what may be done, and render theſe villainous turnpikes the more diſguſting.

Called at Lord Gosfort's, to whom I had been introduced by Lord Harcourt, but he was not yet come from Dublin; his ſteward, however, gave me the few following particulars. About Market-Hill they meaſure by the Engliſh acre, and let from 8s. mountain to 12s. and 14s. The courſes are:

1. Oats. 2. Oats. 3. Oats. 4. Oats. 5. Oats. 6. Oats, then leave it to itſelf to graze 3 or 4 years, this on good ſtrong land; on worſe 3 or 4 of oats, and 3 or 4 of graſs, that is weeds, they reckon the beſt management to lime it on the ſod, then 3 crops of oats, and 3 years left, and that one liming will laſt many years.

Meaſure by bolls, each 10 buſhels; ſow 6 buſhels of oats to an acre; a good crop is 60 buſhels,

buſhels, but that is extraordinary, 4 or 5 bolls common; and the crops will hold good through the whole courſe, the firſt will be the worſt. Another courſe:

1. Potatoes. 2. Flax, or oats. Alſo after ſeveral crops of oats, plough thrice and ſow flax ſeed, 2 buſhels to an acre, and yield 12 to 18 ſtone to every buſhel of ſeed. Never ſow flax twice running. Plant 16 to 18 buſhels of potatoes on an acre; they do not live entirely on them, but have oatmeal, oaten bread, and ſometimes fleſh meat, once or twice a week. In ſpinning a woman will do 5 or 6 hanks a week, and gets 30s. for it by hire, as wages for half a year; a girl of 12 years old three halfpence, or two-pence a day. A man will earn, by weaving coarſe linen 1s. 2d. and 1s. 6d. by fine linen. The manufacturers live better than the labourers; they earn 3s. 6d. a week in winter, and 4s. in ſummer. Manufacturers have all from 6 to 15 acres from 6s. to 20s. an acre, and the houſe into the bargain; generally 2 or 3 cows, and a bit of flax enough for half a buſhel or a barrel of ſeed, at 3 buſhels to an acre. The country labourers have alſo from 6 to 10 acres. A cabbin without land 1l. 1s. a year. Cloth and yarn never ſo dear as at preſent, and people all employed—none idle. A cottage-building 5l. ditto ſtone and ſlate 8ol. A great riſe of both labour and proviſions; 20 years ago beef 1d. and 1½d. per lb. and labour 3d. and 4d. a day.

Religion

Religion moſtly Roman, but ſome Preſbyterians and church of England.—Manufacturers generally Proteſtants.

The manufacturers wives drink tea for breakfaſt. No cattle but for convenience among the ſmall farmers. No farms above 100 acres, and thoſe ſtock ones, for fattening cows and bullocks. Very few ſheep in the country. Manures are lime, of which 20 to 60 barrels per acre, at 1s. 6d. will laſt for ever: beſt for light land—marle grey and white, beſt on heathy ground. Some ſoapers waſte at Armagh and Newry, but not much.

Reached Armagh in the evening; waited on the primate.

July 23d, his Grace rode out with me to Armagh, and ſhewed me ſome of the noble and ſpirited works by which he has perfectly changed the face of the neighbourhood. The buildings he has erected in 7 years, one would ſuppoſe without previous information, to be the work of an active life. A liſt of them will juſtify this obſervation.

He has erected a very elegant palace, 90 feet by 60, and 40 high, in which an unadorned ſimplicity reigns. It is light and pleaſing, without the addition of wings or leſſer parts, which too frequently wanting a ſufficient uniformity with the body of the edifice, are unconnected with it in effect, and divide the attention.

tention. Large and ample offices are conveniently placed behind a plantation at a ſmall diſtance: around the palace is a large lawn, which ſpreads on every ſide over the hills, and ſkirted by young plantations, in one of which is a terrace, which commands a moſt beautiful view of cultivated hill and dale. The view from the palace is much improved by the barracks, the ſchool, and a new church at a diſtance, all which are ſo placed as to be exceedingly ornamental to the whole country.

The barracks were erected under his Grace's directions, and form a large and handſome edifice. The ſchool is a building of conſiderable extent, and admirably adapted for the purpoſe: a more convenient or a better contrived one, is no where to be ſeen. There are apartments for a maſter, a ſchool-room 56 feet by 28, a large dining-room and ſpacious airy dormitories, with every other neceſſary, and a ſpacious play-ground walled in; the whole forming a handſome front: and attention being paid to the reſidence of the maſter (the ſalary is 400l. a year), the ſchool flouriſhes, and muſt prove one of the greateſt advantages to the country of any thing that could have been eſtabliſhed. This edifice entirely at the primate's expenſe. The church is erected of white ſtone, and having a tall ſpire makes a very agreeable object, in a country where churches and ſpires do not abound—at leaſt ſuch as are worth looking at. Three other churches

churches the primate has alſo built, and done conſiderable reparations to the cathedral.

He has been the means alſo of erecting a public infirmary, which was built by ſubſcription, contributing amply to it himſelf.

A public library he has erected at his own expenſe, given a large collection of books, and endowed it. The room is excellently adapted, 45 by 25, and 20 high, with a gallery, and apartments for a librarian.

He has further ornamented the city with a market-houſe and ſhambles, and been the direct means, by giving leaſes upon that condition, of almoſt new building the whole place. He found it a neſt of mud cabbins, and he will leave it a well built city of ſtone and ſlate. I heard it aſſerted in common converſation, that his Grace, in theſe noble undertakings, had not expended leſs than 30,000l. beſides what he had been the means of doing, though not directly at his own expenſe.

When it is conſidered that all this has been done in the ſhort term of 7 or 8 years, I ſhould not be accuſed of exaggeration, if I ſaid they were noble and ſpirited works undertaken upon a man's paternal eſtate, how much more then are they worthy of praiſe when executed not for his own poſterity but for the public good? Amidſt ſuch great works of a different nature, it is not to be expected that his Grace ſhould

ſhould have given much attention to agriculture; yet has he not neglected it. In order to improve the breed of cattle in the country, he brought from England a bull and ſeveral cows of the true Teeſwater breed, of a vaſt ſize, with ſhort Holderneſſe horns; they give a great quantity of milk, and he has preſerved the breed pure and to their ſize, by feeding the calves with much attention: they have a conſiderable quantity of milk given them while at graſs.

In the huſbandry of the neighbourhood no other corn is raiſed than oats, and they have a notion that wheat will not do here: to convince them of the contrary, the primate has fallowed a large field, manured it differently for a compariſon, and ſowed wheat. The crop I viewed, and found it a very fine and a very clean one.

In order that I might be well informed about the linen manufacture, his Grace was ſo obliging as to ſend for one of the moſt conſiderable merchants in the city, Mr. Macgeough, who very intelligently gave me all the particulars I wanted.

The following circumſtances I owe to his information. About Armagh the farms are very ſmall; the principal people occupy from 40 to 60 acres, theſe ſow ſome flax as well as raiſe corn, but in general they are from 5 to 20 acres; the only object the linen manufac-

ture. This is the caſe all the way to Newry; alſo to Monaghan, but in that county the farms are ſomewhat larger. Towards Lurgan, Dungannon, and Stewart's-town, much the ſame. Rents around Armagh are from 7s. to 15s. Much mountain let in groſs by townlands not meaſured; average 10s. The whole county much lower. To Newry 10s. To Dungannon 11s. To Lurgan 10s. The manufacturers, under-tenants on the church-lands, have leaſes of 14 years; on other lands 3 lives, which make a viſible difference in culture. A manufacturer who has 10 acres will keep 2 cows and a horſe, a pig, but not much poultry; he will ſow 1½ or 2 bolls of oats on 3 acres—a buſhel, or 1¼ of flax-ſeed on a rood or a rood and a half, and half an acre of potatoes, or as much as he can dung. His courſe is:

1. Potatoes. 2. Flax. 3. Oats, and let it then lay for paſture, not ſowing in general any graſſes—ſome of them a little clover; the benefit of which is very great. When his ſon grows up and marries, he univerſally divides his farm with him, building a new mud cabbin: thus farms are conſtantly growing leſs and leſs. This is found very hurtful, by reducing them ſo low that they will not ſupply the people with neceſſaries. Scarce any of them have potatoes and oats to feed their families; great importations from Louth, Meath, Monaghan, Cavan, and Tyrone, beſides what comes occaſionally from England and Scotland.

Their

Their food principally potatoes and oatmeal, very little meat; the better ſort, however, buy ſome beef for winter, but it is not common. Many of them live very poorly, ſometimes having for 3 months only potatoes and ſalt and water. There are few labouring poor unconnected with the manufacture, but when it is not in a very flouriſhing ſtate, they live better than thoſe employed by linen. No flax farmers; ſcarce any but what is raiſed in patches by the cotters. Upon light or mountain lands they prefer the American flax-ſeed. Upon heavy or clay lands they ſow Riga Dutch, or Flanders ſeed; the quantity they get is more and better in quality than from the American, and will laſt 20 years. For fine linens they never ſave ſeed, pulling it green: but for coarſe linens they ſave as much as they can.

I was informed that the produce of the flax depended on the oilineſs of it, and that the goodneſs of the linen on not being too much bleached, which is only an exhalation of the oil. If ſo, it ſhould appear that perfecting the ſeed muſt injure both linen and flax: but ſtill the contrary is the opinion here. The quantity of ſeed from 2½ to 3 buſhels per acre: or 4 buſhels of their own, from the idea that it is not ſo well ſaved.

They plough their potatoe-land or barley-ſtubble once the end of March or April, and ſow it. But it is found by ſeveral that the

beſt flax, and the greateſt quantity, is by ſowing their pooreſt lands that have been run out by oats, upon 3 ploughings, and the reaſon they do it not more is for want of ability to give the 3 ploughings. They weed it very carefully. They generally pull it the latter end of July and the beginning of Auguſt, and immediately ripple it to get the ſeeds off, and then lay it into water from 6 or 7 to 12 days, according to the ſoftneſs of the water, trying it before they take it out: the ſofter the water the ſhorter the time, generally bogs or pools, the bog the beſt. They lay it ſo thick as to fill the pool. When they take it out, they ſpread it on meadow ground from 10 to 15 days, according to weather; if that is very bad, much of it is loſt. Upon taking it up, they dry by laying it in heaps on a hurdle fixed upon poſts, and making a fire of turf under it. As faſt as it dries, they beat it on ſtones with a beetle, then they ſcutch it to ſeparate the heart or the *ſhoves* from the reſt. Mills are invented for this, which if they uſe, they pay 1s. 1d. a ſtone for it, which is cheaper than what their own labour amounts to. They next ſend it to a flax-hackler, which is a ſort of combing it, and ſeparates into two or three ſorts; here generally two, tow and flax. In this ſtate it is ſaleable. The crop is from 18 to 48 ſtones per acre of flax rough after ſcutching. The medium is 30 ſtone, and it ſells from 6s. 8d. to 9s. Much Dutch flax is imported, alſo from Riga, Koningſberg and Peterſburg, which generally regulates the price

price of their own: the 12 head Peterſburg is much the beſt of the common ſort, 12 head Narva not ſo good, but Marienburg better than Narva. The 9 heads to a bunch coarſe. Dutch blay and Dutch white, good and wirey; but the beſt of all is the ſilver blay from Briſtol, which comes down the Severn: it is fuller of oil, ſofter and better than any other ſort. The average price of their own 2l. 8s. to 2l. 12s. per cwt. or 7s. to 7s. 6d. a ſtone. It is liked better than the imported.

Expenſe of an acre of land under flax.

	£.	s.	d.
Rent [N. B. Their 10s. an acre, abovementioned, includes ditch, &c.] -	0	14	0
Seed bought from 10s. to 13s. a buſhel. Average 12s. 3 buſhels - -	1	16	0
One ploughing - - -	0	7	0
Carrying off the clods and ſtones by their wives and children, 6 women, an acre a day -	0	2	2
Weeding 10 women an acre in a day, 4d.	0	3	4
Pulling by women and children, 12 at 4d. -	0	4	0
Rippling by men and women, ſay 4 men at 10d.	0	3	4
Laying it in the water according to diſtance, ſay	0	5	0
Taking it out and ſpreading - - -	0	5	0
Taking up, drying and beetling, 42 women a day at 4d. - - -	0	14	0
Scutching 30 ſtone at 1s. 1d. - - -	1	12	6
Total	6	6	4
30 ſtone at 4s. 2d. - - - £.	6	5	0

If

If let to a man who ſhould farm flax, the labour would be much higher, as it is here reckoned only at the earning, which they could make by the manufacture, and not the rate at which they work for others. Hackling is 1s. 1d. a ſtone.

We next come to the manufacture. The ſtone-rough after hackling will produce 8lb. flax for coarſe linen, and 3½ lb. of tow. The 8 lb. will ſpin into 20 dozen of yarn, or 20 hanks or 5 ſpangles fit for a ten hundred cloth, which is the common ſort here; and the earnings in ſpinning will be from 5s. to 6s. 8d. the 5 ſpangles, and it is very good work to do that in 20 days by one woman; in common 25 days, conſequently they earn ſomething better than 3d. a day. Seven and a half ſpangles will weave into a piece of linen (ten hundred ſort) of 25 yards long, and yard wide. Thus one ſtone and a half of flax at 7s. a ſtone, market-price, will make that piece. But the tow remains 4¾ lb. which is 2s. 2d. of which they make a coarſer linen. 30 ſtone, the produce of an acre, make therefore 20 ſuch pieces. The price of this cloth is from ten-pence halfpenny to eleven-pence halfpenny a yard brown, the ſtate in which they ſell it. Average eleven-pence. The fixed price for weaving it is two-pence halfpenny a yard. But this is when the poor are not able to raiſe it, and work for hire for thoſe who advance them the yarn. A great deal is done in this manner, as well as by thoſe who raiſe the flax;

and

and go through the whole of the operation. When the weaver has made his piece of cloth, he goes into the market of Armagh, which is every Tuesday, and sells it to the draper as he would any other commodity, always receiving the money on the spot, as there is no credit. The draper names the price, and the man takes or refuses it. There are many drapers, so that the man tries whom he pleases: there is no combination against the seller, but rather a competition. The draper generally has the bleach greens; and the expense to him of bleaching is 4l. 10s. to 5l. a pack of 30 pieces, or 3s. to 3s. 2d. a piece. Then he either sends it to factors in London or Dublin, or sells it at the linen-hall in Dublin. Some go over to Chester fair themselves, and dispose of it there. In London he gives 7 months credit: in Dublin 2 or 3: but if he goes himself to the hall, he gets part ready money. The London factor has 6 per cent. for selling and advancing the money as soon as sold, and half per cent. for warehouse room and insurance from fire. This is the principal part of the trade about Armagh.

In general the manufacture was at the height in 1770 and 1771. In 1772 and 1773 there was a great decline both in price and quantity. In 1774 very low, till May; when a sudden rise from a speculation of sending to America, and for the demand of the Spanish flota, which was detained a year for want of coarse linens, not being able to be supplied from

from Germany as uſual: and ſince May 1774, it has continued very flouriſhing, but is not yet equal to what it was. The decline in 1772 and 1773, owing to the deſtruction of credit, and to the want of a market, but let me obſerve that a convulſion in credit neceſſarily contracts the market. Another circumſtance was the price of bread in England, which they think, was ſo high, that the Engliſh could not afford to buy much of theſe coarſe linens, of which they are the great conſumers. Germany they conſider as the great rival, and not Scotland. It is thought that their flax is well cultivated, and admits of no great improvement. The emigrations were chiefly in 1772 and 1773. Many weavers and ſpinners, with all their families, went. Some farmers, who ſold their leaſes, went off with ſums from 100l. to 300l. and carried many with them. They ſtopped going when the war broke out. In 1772 and 1773 many turned farming labourers, which is not the caſe when the trade is high.

The religion generally Roman, ſome Preſbyterians: Proteſtants emigrated moſt. The oak boys and ſteel boys had their riſe in the increaſe of rents, and in oppreſſive county ceſſes.

July 24th, took my leave of his Grace, and breakfaſted with Maxwell Cloſe, Eſq; at ——, who was ſo kind as to mention a few circumſtances

ſtances in addition, and ſome in contradiction, to what I had learnt at Armagh.

The manufacture at its greateſt height at preſent; the price greater, and the quantity alſo. The emigrations nothing about Armagh; but Antrim, and Down and Derry, many, chiefly idle fellows, who have not been the leaſt miſſed: ſome went with money, but the ſums not conſiderable. It was ſaid that Lord Donnegal's high rents were the cauſe, but when they went they ſold their leaſes, and got 20l. 30l. or 40l. for many, and it was this money chiefly carried them. A weaver will earn from 1s. to 1s. 4d. a farming labourer 8d.

COURSE OF CROPS.

1. Potatoes. All their dung for them, the produce 40 or 50 barrels; the beſt ſorts are the London lady, French white, black Spaniſh. 2. Bere. 3. Flax, the produce 48 ſtone, ſcutched, at 8s. 4. Oats.

Lime uſed much, the price 10d. to 1s. 6d. a barrel. Marle under the bogs, white and light, but little uſed. Tythes, oats 2s. 6d. to 3s. 6d. Barley 5s. Year's purchaſe of land fell much in 1772 and 1773. There are many middle men.

The oak boys began at Blewſtone upon the county ceſs; but in a moment roſe to rents, tythes, bogs, and every thing elſe: idle raſcals all that went to America.

Mr.

Mr. Cloſe has had very fine turnips, with which he fed fat wethers from autumn for the ſpring markets, and gained thereby 1½d. a lb. difference in price.

Took a ride to ſee the neighbouring country by Killilean-hill, Fellows-hall, Woodpark-lodge, Liſloony, Tinan, and Glaſlough, which indeed is a round that ſhews the country to advantage; it is a continued picture: ſtop where you pleaſe, you are in the midſt of a beautiful landſcape. The hills are waving in every variety of outline that can be imagined; there is a great plenty of wood, every tree of which is ſeen to advantage from the inequality of ſurface. It is a chearful, beautiful country, and well worth a traveller's time to take this ride, in order to ſee it. Ireland, notwithſtanding her general nakedneſs, contains ſome ſcenes of beauty in which wood bears a conſiderable ſhare.

Called in our ride at Mr. Leſly's at Gaſlaugh, viewed ſome of his great improvements: he was abſent, but Mrs. Leſly was ſo obliging as to walk through the woods with us. The lake is a large one, containing 120 acres, and the wood of 100 acres ſpreads over a fine bold hill, and hangs down to the water in one deep ſhade, the effect remarkably beautiful: additional plantations are made, and walks cut through the whole. In the evening Mr. Leſly came to Mr. Cloſe's, and I then had pleaſure of learning that much of his domain, from

from being a poor waſte tract of little value, was converted to what I had ſeen, that is, to very fine graſs land. The ſoil is ſtiff cold clay, the ſpontaneous growth ruſhes, &c. ploughed moſt of it firſt, and then manured it with either lime or marle: of lime from 100 to 120 barrels per acre, at 7d. a barrel on the ground from ſtone and turf of his own. Then took a crop of wheat, which proved very fine; after the wheat, laid it down with oats and hay-ſeed, the oats very good. Sowed the ſeeds of a hay-loft with clover: has uſed much compoſt made of ditch ſcowerings, lime, marle, &c. and ſpread it in the ſame manner as the lime; ſome, after the land was laid to graſs, but did it beſt on the fallow. Much of the land ſo wet, that hollow drains were neceſſary, and made ſo as to lay the lands dry, the cuts very numerous, and proved effective. His fences are excellent, 2 rows of quick, and a ditch 6 by 7, a dry hedge at top, and the back dreſſed and planted with foreſt trees paled in. Mr. Leſly has found the buſineſs of improvement profitable, ſo that if a tenant had the money neceſſary, he would find it to be the beſt work he could engage in with a view to profit alone.

July 25th, returned through Armagh. Paſſed Sir Capel Molyneux's domain, which ſeems an extenſive and very fine one. Near it I obſerved that the ſoil was one of the fineſt red ſandy loams I have any where ſeen, and ſeveral pieces of potatoes were planted in drills, which

which is a practice I had not yet remarked. Dined with Mr. Workman, at Mahon; about that place the size of their farms are from 10 to 20 acres, at about 12s. to 15s. an acre; and some of them hiring 20 acres, will let off 5 or 6 at 18s. to 20s. an acre. They are in general very well off as to living; their food is *stir-about*, potatoes, bread of maslin or wheat, and some meat once a fortnight. They are well cloathed, and have plenty of fuel; a man with 20 acres will have 150 kishes of turf a year. A man of 15 acres will have between a rood and half an acre of flax; one acre of potatoes; 2 to 4 acres of oats, and will mow 2 acres; one horse, 2 or 3 cows, one young beast, and a pig, but not much poultry. Pigs depend on potatoes.

Their course: 1. Potatoes. 2. Flax. 3. Oats, or 4. Oats, and then leave it to grass itself. Scarce any fallow, a few sow clover, which increases, to mow for soiling their cows. The weavers universally earn much more than the few country labourers there are. The best flax seed for clay land the Dutch, and for light land the American. Scarce any of them save their own seed, consequently no rippling; it must stand then till dead ripe, which they think lessens the quantity, and makes it coarser. The richer the land the better. Sow generally on one ploughing. They weed it with much care. In watering, clay water reckoned much better than bogs, which they are leaving off. In general they scutch

ſcutch it themſelves, and it is cheaper than the mills. Mr. Workman has paid 1s. 6d. for it by hand, and 1s. 1d. to the mills, and found the former cheaper; more flax from hand, and much cleaner. Immediately after ſcutching it is ſaleable in the market. Price of flax 6s. to 13s. ſcutched.

Expenſes per acre.

	£.		
Rent	0	13	0
Seed 2½ buſhels, at 10s.	1	5	0
One ploughing and harrowing	0	5	0
Weeding	0	0	10
Pulling by women			
Laying in water	0	1	0
Taking it out and ſpreading	0	3	0
Taking it up, drying, and beetling	0	8	0
[Some beetle it with *breaks*, which is to the full as good as the beetles, and is done for a third of the money.]			
Scutching 25 ſtone, at 1s. 6d.	1	17	6
Then ready for market.	£. 4	13	4
Hackling	1	5	0
Value before hackling, from 6s. to 13s. Average 8s.	10	0	0

The

The rough ſtone, after hackling, will produce 8lb. flax for coarſe linen; and 4lb. of dreſſed tow, and ſome for *backens*. The ſpinners earn from 3d. to 4d. a day. The weavers earn 10d. to 1s. 4d. The coarſe cloths and yarn never ſo high as at preſent. Weavers very often turn labourers, which is attributed to ſo many being, contrary to law, bound apprentices for 2 years, inſtead of 5, by which means they are bad hands, and can only do the very coarſeſt work. As to health, from the ſedentary life, they rarely change their profeſſion for that. They take exerciſe of a different ſort, keeping packs of hounds, every man one, and joining, they hunt hares: a pack of hounds is never heard, but all the weavers leave their looms, and away they go after them by hundreds. This much amazed me, but aſſured it was very common. They are in general apt to be licentious and diſorderly; but they are reckoned to be rather oppreſſed by the county ceſſes for roads, &c. which are not of general uſe. There is ſome wheat, and about Kilmore a good deal; a middling crop 5 barrels. Oats yield here 6 barrels on an average. Mr. Workman, 9 years ago, introduced the uſe of lime, and they are ſince coming faſt into it: the effect is very great, though the ſoil is a wet loam on clay without any ſtones. No draining. They are in general very bad farmers, being but the ſecond attention, and it has a bad effect on them, ſtiffening their fingers and hands, ſo that they do

do not return to their work ſo well as they left it.

In the evening reached Mr. Brownlow's at Lurgan, to whom I am indebted for ſome valuable information. This gentleman has made very great improvements in his domain: he has a lake at the bottom of a ſlight vale, and around are three walks, at a diſtance from each other; the centre one is the principal, and extends 2 miles. It is well conducted for leading to the moſt agreeable parts of the grounds, and for commanding views of Loch Neagh, and the diſtant country; there are ſeveral buildings, a temple, green-houſe, &c. The moſt beautiful ſcene is from a bench on a gently ſwelling hill, which riſes almoſt on every ſide from the water. The wood, the water, and the green ſlopes, here unite to form a very pleaſing landſcape. Let me obſerve one thing much to his honour; he advances his tenants money for all the lime they chuſe, and takes payment in 8 years with rent.

Upon enquiring concerning the emigrations, I found that in 1772 and 1773, they were at the height; that ſome went from this neighbourhood with property, but not many. They were in general poor and unemployed. They find here, that when proviſions are very cheap, the poor ſpend much of their time in whiſkey-houſes. All the drapers wiſh that oatmeal was never under 1d. a pound. Though farms are exceedingly divided, yet few of the people

raiſe

raiſe oatmeal enough to feed themſelves; all go to market for ſome. The weavers earn by coarſe linens 1s. a day, by fine 1s. 4d. and it is the ſame with the ſpinners, the finer the yarn the more they earn; but in common a woman earns about 3d. For coarſe linens they do not reckon the flax hurt by ſtanding for ſeed. Their own flax is much better than the imported.

This being market day at Lurgan, Mr. Brownlow walked to it with me, that I might ſee the way in which the linens were ſold. The cambricks are ſold early, and through the whole morning; but when the clock ſtrikes eleven, the drapers jump upon ſtone ſtandings, and the weavers inſtantly flock about them with their pieces: the bargains are not ſtruck at a word, but there is a little altercation whether the price ſhall be one-halfpenny or a penny a yard, more or leſs, which appeared to me uſeleſs. The drapers clerk ſtands by him, and writes his maſter's name on the pieces he buys, with the price; and giving it back to the ſeller, he goes to the draper's quarters, and waits his coming. At twelve it ends; then there is an hour for meaſuring the pieces, and paying the money, for nothing but ready money is taken; and this is the way the buſineſs is carried on at all the markets. Three thouſand pieces a week are ſold here, at 35s. each on an average, or 5,250l. and per annum 273,000l. and this is all made in a circumferance of not many miles.

The

The town parks about Lurgan let at 40s. an acre, but the country in general at 14s. The huſbandry is exceedingly bad, the people minding nothing but flax and potatoes.

Leaving Lurgan I went to Warrenſtown, and waiting upon Mr. Waring had ſome converſation with him upon the ſtate of the country. He was of opinion, that the emigrations had not thinned the population, for at preſent they are crowded with people; but he thinks if the war ends in favour of the Americans, that they will go off in ſhoals. Very few Roman Catholics emigrated. The riſing of the ſteel boys was owing, as they ſaid, to the increaſe of rents, and complaints of general oppreſſion; but Mr. Waring remarked, that the pardons which were granted to the oak boys, a few years before, were principally the cauſe of thoſe new diſturbances.

Croſs the road to Mr. Clibborn's, who gave me much information of the greateſt value concerning the linen manufacture. Firſt, in reſpect to the flax: the following is the expenſe of an acre.

	£.	s.	d.
Rent - - -	1	1	0
Four buſhels of ſeed 10s. - -	2	0	0
Two days work, ploughing, &c. -	0	10	10
Stoning, one woman, 4 days -	0	2	0
Carried over,	£. 3	13	10

	£.		
Brought over	3	13	10
Flax ſown on a lay no weeding (the other 12 days of a woman, at 6d.)	0	6	0
Pulling, 12 ditto	0	6	0
Four men carrying out to water, and 2 days of 1 horſe	0	16	0
Taking out and ſpreading, 16 women,	0	8	0
Taking up, lifting, 4 women a day	0	2	0
Beetling, 4 men 2 days beetling, and 4 women to dry it	1	0	0
Twelve kiſh of turf	0	18	0
Scutching	5	0	0
Some ſold then, and ſome not till hackled, which for 40 ſtone the acre, 1s. 3d.	2	10	0
	14	19	10
Value after ſcutching, 7s. 6d. a ſtone,	15	0	0
Expenſes	13	3	10
Profit	£. 1	16	2

After hackling 2s. 6d.

The ſtone of flax, rough after hackling, will produce $3\frac{1}{2}$ or $3\frac{3}{4}$lb. of flax for 1800 linen, and the $3\frac{3}{4}$ will ſpin into 60 hanks fit for an 1800 linen. Spinners are generally hired at 10s. 6d. and 12s. the quarter, beſides board and lodging; and for that they ſpin 4 hanks a week of 6 hank yarn for 1600 linen, and 3 a week of 8 and 9 hank yarn for 1700 linen. As ſoon as the yarn is ſpun it is boiled. The boiling changes it 1 hank in a pound;

pound; 6 hank yarn will become 7. If flax is given out to be ſpun, they will get 3d. a hank for 6 hank yarn for ſpinning it, and they do one a day. The linen made here is from 8 hundred to 24; of coarſe linen 10 hundred, the common; and of fine, 13, 14, and 15. The pieces are 25 yards long, and yard wide.——53 Hanks for a web of 1600,—63 for 1800.——49 Hanks will make a piece *(a web)* of 1400, which ſells at 20d. brown. The weaver is paid 10s. for weaving the 14 hundred web, and he will weave it in 9 days. For cambricks the yarn is not boiled, and therefore ſo much finer; they will earn more at it than at linen, but is not ſo ſaleable.

Much done by drapers advancing the yarn, and paying for the weaving at ſo much a yard. For 8 hundred, 2½d. a yard.—10 ditto, 3½d.—13 ditto, 3¾d.—16 ditto, 7d.—18 ditto, 10½d.—24 ditto, 1s. 7½d.—The finer the linen the more they earn. In fine linen, going from it to the plough or ſpade, &c. hurts their hands ſo much, that they do not recover it for a week; but not common for them to do it.

1 Stone, 3¾lb.—60 hanks—15 weeks—1 woman. 2 Stone 30. 3 Stone 45. ½ Stone 7½. 3½ Stone 52.——Weaving 63 hanks into a web of 1800, he has 20s. for it, and does it in 12 days; but all preparations, dreſſing, &c. included, it will be three weeks, at which rate he can work for a year.

The prices of the cloth are:

	Market Low.	Market High.
8 hundred	8½d.	11½d.
10 ditto	1s.	1s. 2½d.
12 ditto	1s. 2d.	1s. 4½d.
15 ditto	1s. 7d.	1s. 9d.
17 ditto	2s. 4½d.	2s. 6d.
20 ditto	3s. 10d.	3s. 10d.
24 ditto	7s.	7s.

Bleach greens ſometimes belonging to the drapers, ſometimes not. In bleaching it is ſteeped in cold river water, or ſometimes not at all; then to the waſh-mills for waſhing; then boiled in barilla aſhes, (or America or Ruſſia pot-aſh) imported from Alicant to Newry or Belfaſt; the quantity of the barilla uncertain, about half a buſhel to 100 pieces. Boiling 6 hours. Waſhed thoroughly after this and ſpread on graſs for 4 days; lift it and boil it again as before; then to the graſs again, and repeated till nearly white for rubbing. Next put it into a ſcald of ſoap, and from thence into the rub boards; if coarſe cloth one rub ſufficient, but for fine three or four. After rubbing, waſhed, and put to ſower in vitriol and water, 24 hours will do, but 10 days no injury; fine cloth 3 ſerves, one after every rub, but for coarſe one rub is ſufficient. This ſowering merely for cleanſing and purging. After ſowering it has a ſcald of ſoap, from

from which well waſhed, wrung, and made ready for ſtarch and blue; then dried and beetled, which is done by a mill, after which done up with a ſcrewing machine for ſale. The expenſe of bleaching 3s. a piece, for coarſe 4s. middling 5s. fine 6s. Theſe the particulars commonly known among bleachers; there are ſecrets in the trade which they of courſe do not communicate, but not ſo many I apprehend as generally ſuppoſed; for where there are few, or even none, but with an appearance of them, all is ſuppoſed by the vulgar to be myſtery. Upon the above account I have only to remark, that the rubbing appears to me an operation for giving the cloth beauty at the expenſe of ſtrength. It is a moſt ſevere operation, being drawn between boards full of teeth, which are made for the profeſſed purpoſe of adding to the friction; and the effect is ſuch, that large quantities of knap are conſtantly taken out of the machine. This is a very fine invention for wearing out a manufacture as ſoon as made.

Mr. Clibborn was ready enough to confeſs that this work is carried too far, but the London drapers, he ſays, demand thick cloths, and this operation contracting the breadth of the piece gives it a thick appearance, which they are fond of. The beetling does not appear to me to be near ſo ſevere an operation. It is a continued ſyſtem of perpendicular ſtrokes upon the cloth wound round a cylinder, for the purpoſe of ſmoothing it, and giving it

a gloſs,

a gloſs. It is ſold at Dublin; half the manufacture to London from Newry, Belfaſt, or Dublin. Cambrick all ſold in Dublin: it encreaſes much. In 1771 more goods made than at preſent. England the great conſumption of Iriſh linens. Scotland nor Germany interfere with thoſe above deſcribed. No rivals in the Iriſh 7-8ths and 3-4ths yard wide, but in the dowlas and diaper the Germans; and in ſheeting the Ruſſians. The dowlas and ſheeting are made in King's and Queen's County, and Weſtmeath. Diapers here, in which the ſame yarn as above, the breadths various, and the weavers make more by it than by linen. The trade as briſk at preſent as the reſt. Hands are plentiful for the demand, notwithſtanding the emigrations; but the men do not work more than half what they might do, owing to the cheapneſs of proviſions making them idle, as they think of nothing more than the preſent neceſſity. A general remark of all who know the trade, that when proviſions are dear the more goods come to market; what they raiſe themſelves not half feeding them. A child 7 years old earns 1d. a day ſpinning. There are as many employed in diaper as in cambricks. Manufacture not doubled in 15 years, about 1-third or 1-fourth increaſe in that time. The preſent high price of linens and yarn attributed to the increaſed demand at Mancheſter for yarn: it is now 9d. a hank. Alſo to the Spaniſh market for linen being almoſt a new trade. Likewiſe to foreign linens coming dearer to market than formerly.

merly. The weavers and ſpinners generally live upon oatmeal and potatoes, and milk, with meat once a week, and have their belly full.

A farm 6 acres:—1 ½ Hay. 1. Rood flax. 1. Acre potatoes. 1. Oats. 2. Cows. 1. Horſe. 2. Sheep. Rent, 5l. 12s.

1. Potatoes uſually 160 buſhels to the acre. 2. Flax. 3. Oats. 4. Left 2 years.

1. Plough 3 or 4 times for flax. 2. Wheat, or barley. 3. Oats. 4. Oats. 5. Left.

Very few ſave their ſeed; but this more than uſual, owing to the import from America falling off. Much damaged by ſtanding for ſeed from *firing*, and a great chance run of loſing the crop; hut if the weather good not the worſe for coarſe linen, but will not do at all for fine. Clay land does beſt for it. They uſe much lime, 140 barrels per acre, at 1s. 1d. at kiln, and 6d. more carriage: they lay it on for wheat and barley. It is reckoned to pay ſo well, that all uſe it who are able.

	£.		
Rent of a cabbin and garden	1	10	0
Graſs for a cow	1	10	0
Hay for ditto	1	10	0
	4	10	0

Many

Many weavers families have tea for breakfaſt. Rents rather lower than 4 or 5 years ago.

Leaving Warrenſtown, reached Hillſborough that night; paſſed thro' Dromore, a miſerable neſt of dirty mud cabbins. Lord Hillſborough has marked the approach to his town by many ſmall plantations on the tops of the hills, through which the road leads. The inn of his building is a noble one for Ireland.

July 27th, walked to the church built at the expenſe of Lord Hillſborough; there are few ſuch in Ireland. It is a very handſome ſtone edifice, properly ornamented, and has a lofty ſpire, which is a fine object to the whole country. The form of the church is a croſs, the body of it 160 feet long, and the croſs-iſle 120. The ſtep to the communion table is of one ſtone out of his lordſhip's quarry, 21 feet long, and 2 broad. To the improvements—the lake, woods, and lawn are pretty; but a well built and flouriſhing town in the hands of an abſentee, whoſe great aim is to improve and adorn it, does him more credit than twenty domains.

Reached Liſburn, and waited on the biſhop of Downe, who was ſo obliging as to ſend for an intelligent linen-draper, to give me ſuch particulars as I wanted of the manufacture in that neighbourhood. About this place chiefly

chiefly fine cloth, from 14 to 21 hundred. The ſpinners are generally hired by the quarter, from 10s. to 12s. lodging and board, and engaged to ſpin 5 hanks of 8 hank yarn in a week.

To the 14 hund. linen 46 hanks——18 ditto 58 hanks——28 ditto 66 hanks.

In weaving it is common for one man to have ſeveral looms, at which journeymen weavers work, who are paid their lodging and board, and one-third of what they earn, which may come to 2s. a week on an average.

The drapers advance the yarn, and pay for the weaving by the yard, For a 15 hund. 4d.——18 ditto 9d.——21 ditto 1s. 1½d.

For 18 hund. linen, a woman ſpins 6 hanks a week, which 6 hanks weigh about a pound, at the price of 8d. a hank. The manufacture carried on in the country very much by little farmers, who have from 5 to 10 acres, and univerſally it is found, that going to the plough or ſpade for a day or two ſpoils them for their weaving as many more. Think that flax that has ſtood till ſeed is ripe, will not do for more than a 1600 web. Rent for ſowing flax on potatoe land 4d. a perch long of 21 feet and 10 broad. The crop at a medium 10 ſtone from a buſhel of ſeed. The ſtone 16lb. A ſtone of good flax, rough, will produce 8lb.

after

after hackling, and ſpin into it as many hanks per lb. as the ſort is, that is, 6 hanks of 6 hank-yarn, 7 of 7. The weavers, ſpinners, &c. live in general on potatoes and milk, and oat-bread, and ſome of them meat once a week.—Will work only for ſupport; meal and cloth never cheap together, for when meal is cheap, they will not work. Rent of land from 10s. to 22s.

Leaving Liſburn, took the road to Belfaſt, repeating my enquiries; in a few miles I found the average rent 16s. per Cunningham acre. Much flax ſown, three buſhels and a half of ſeed generally ſown to an acre. Eight ſtone of flax, from half a buſhel of ſeed, is reckoned a very good crop. If they have not land of their own for ſowing, they pay 12s. rent for what half a buſhel requires: this is 4l. 4s. per acre, but it includes ploughing, harrowing, and getting ready for the ſeed.

Rent, &c. - - -	4	4	0
Weeding - - - -	0	5	0
Pulling 12 women, at 8d. a day - -	0	8	0
Watering, damming, and ſtones, 6 men a day at 9d - - -	0	4	6
Taking and graſſing, 6 women a day -	0	4	0
Taking, lifting and drying, generally in the ſun, 6 women 1 day - - -	0	4	0
None rippled.			
Scutching at mills, 1s. 4d. a ſtone, 56 ſtone	3	14	8
£.	9	4	2

PRODUCE.

PRODUCE.

56 ſtone, at 9s. 4d. - - -	26	2	8
Expenſes - - - - - - -	9	4	2
Profit - - - - - - £.	16	18	6

Hackling is 1s. 2d. a ſtone, and half the weight is loſt; the produce will be 4lb. flax and 4lb. tow, which the Scotch generally buy at 3d. a lb. To a ſtone hackled there are 96 hanks; and to the web of cloth there are 28 hanks for the weft, and 30 for the warp. A weaver is three weeks doing it, and is paid 17s. From Liſburn to Belfaſt, on the river Leggon, there are 12 or 13 bleach greens. The counties of Down and Antrim are computed to make to the amount of 800,000l. a year, and near one-third of it in this vale.

Paſſed Lord Dungannon's at Bever, whoſe plantations are got up to a fine ſhade by means of planting very thick; went to Caſtle-hill, Mr. Townley Blackwood's. Rents there are 15s. an acre, Cunningham-meaſure. Averrage of the county of Down 10s. Sowing clover with flax is practiced here, coming in much, and found to be very beneficial.

In the evening to Belfaſt. I had letters to Mr. Portis and Mr. Holmes; but upon calling at their houſes, found the firſt in England and the other in the country: ſo conſiderable a place as Belfaſt demanded a better account than I could give without aſſiſtance. At dinner

ner at Mr. Blackwood's, a Doctor Haliday was mentioned as a gentleman of general knowledge, and at the ſame time of a liberal diſpoſition: it was the only name I knew at Belfaſt after my two letters proved uſeleſs. I determined to make known to this Doctor Haliday my wants, and beg his aſſiſtance in gratifying them, and accordingly wrote a note and ſent it. He alſo in the country. Still I was unwilling to give up all thoughts of Belfaſt; and as I had planned going to Strangford, and from thence to Liſburn in my way north, I determined upon returning again to Belfaſt, in order for a farther chance of meeting with ſomebody that could anſwer me a few queſtions about the progreſs of the commerce of the place.

July 28th, took the road to Portaferry, by Newtown, where I breakfaſted; it is an improving place, belonging to Mr. Stewart, who has built a very handſome market-houſe, and laid out a ſquare around it, which he deſigns building. I was informed here that the linen manufacture is much leſs conſiderable than it was. Since the decline of 1772 and 1773, many weavers they told me had turned labourers. but the ſpinning buſineſs continues as much as ever.

Leaving the town, the road leads at once to the ſhore of Strangford Loch, where I obſerved heaps of white ſhells, and upon enquiry found that they dig them at low water in the

the Loch in any quantities: they lay them on their lands, but do not find that they laſt ſo long as lime. Farms riſe to 40 acres; rents 15s. to 21s. Cunningham-meaſure. Wheat yields to 30 buſhels; oats to 40.

As I advanced, making farther enquiries, ſtill I was told that the weaving, at preſent, was not near ſo good as ſeven years ago. Flax, in ſome pariſhes, pays no tythe; in others, it is taken in kind. Two buſhels of potatoes, on a ridge ſeven yards long and two wide, is a very good crop. Rents from 10s. to 21s. A common courſe.

1. Oats on lay. 2. Wheat. 3. Oats. 4. Barley. 5. Oats. 6. Barley. 7. Oats. 8. Left for lay, a few ſow clover or rye-graſs for two years.

Paſs Newtown Stewart, a row of neat ſtone and ſlate cabbins, in the neighbourhood of ſome new plantations which ſurround an improved lawn, where Mr. Stewart intends building. The ſoil is in general light, dry, ſandy or gravelly. Sea-wrack is collected for burning into kelp all along the coaſt of the Loch. There are many lime-kilns all the way to Portaferry; I was told 35, and that 15 years ago there was only one, ſo much is the improvement of land increaſing. The ſtone is brought by ſea from Carlingford, and burnt with coals and turf. The expenſe reckoned 1s. 1d. a barrel. It laſts ten years. Shells are ſome time

time before they work, but they laſt longer than lime, directly contrary to what I was told before, from whence one may ſuppoſe the point diſputable. Rents 16s. to 20s. Remarked ſeveral great rocks on the ſhore, which ſeem to have no connection with the coaſt, which is not rocky, nor at all in uniſon with ſuch fragments.

Reached Portaferry, the town and ſeat of Patrick Savage, Eſq; who took every means of procuring me information concerning that neighbourhood.

July 29th, collected ſome concerning the fiſheries. It is a ſummer herring-fiſhery for the home conſumption of the country; they are now taken chiefly off the peninſula of Ards. Formerly the great take was in the Loch, till within theſe 4 years. To the whole coaſt they reckon that there are 400 boats; they are of 4 or 5 ton burthen; and coſt 15l. a boat, the nets coſt 10l. and there are 4 to each boat. A boat will catch 6 maze of herrings in a night, each 500; and they ſell at 8s. 8d. a maze on an average: it is, however, a precarious fiſhery. In 1774 it was very good: in 1775 very bad; this year it has begun finely. It begins the 12th of July, and finiſhes the end of September. It is in general carried on by ſhares; the boat and nets have one half, and the 4 men the other half. They earn, upon an average, 1l. 1s. each a week by it: 110 boats belong to Portaferry. The men are

are chiefly from the country; the whole barony of Ards are fiſhermen, ſailors, and farmers, by turns. This little port has a tolerable ſhare of trade: they have 12 ſhips, which go annually to Loch Swilly herring-fiſhery, which is a winter one on the bounty of 20s. a ton; they have 15 ſhips belonging to the place, from 30 to 150 tons, at 6 men each, and many others trade here. Coals are brought from Whitehaven; and from Gottenburgh and Norway timber and iron. Trade increaſes, and the place is much more flouriſhing than it was.

Rode in the evening to Millen Hill on the coaſt of Ards, to ſee the herring fleet go out. It is in the town-land of Tara, and is an excellent ſpot for a light-houſe, which is much wanted on this coaſt, for it is exceedingly rocky and dangerous from St. John's point to Donaghadee, ſo that no winter paſſes without ſhipwrecks, and in ſome there are a dozen. Under the hill appeared the north and ſouth rock, with foul ground all around. A light-houſe might be built here for 60l. and the annual expenſe would not exceed 150l.

The barony of Ards is in general a wet, ſtrong, or clay ſoil, with a good deal of bog; lets on an average at 10s. 6d. an acre, the whole county 10s. the ſize of the farms on a medium about 40 acres, a few up to 100, and many down to 5 in weavers hands. Courſe of crops.

1. Potatoes

1. Potatoes dunged for. 2. Wheat, yields from 28 to 40 buſhels, but reckon it by cwts. 3. Barley. 4. Oats. 5. Clover for 3 years, or clover and hay-ſeeds in caſe deſigned to lay longer, 6, 7, and 8. Oats. Alſo,

1. Potatoes. 2. Flax. 3. Corn, &c.

A great deal of lime uſed from Carlingford; the ſtone is brought and burnt with Milford or Scotch culm, and coſts them, when burnt, about 11d. a barrel. It has been found very beneficial, has been uſed about 10 or 12 years: it does beſt on middling land neither very dry nor wet. Sea-ſand is much uſed for ſtrong clay, and brings the fineſt crops that can be. White marle from under the bogs they prefer to lime; it improves land ſo much that it will never be as bad again. Wherever they can get ſhell ſand, they do, and find the benefit very great: ſea-weed they alſo uſe for their barley lands what they get in winter, but in ſummer they dry and burn it into kelp. Cattle very trifling, only ſmall ſtocks for convenience. The principal religion is preſbyterian.

If a weaver has, as moſt have, a crop of flax, the wife and daughter ſpin it and he weaves it: if he is not a weaver, but employed by his farm, they carry the yarn to market. The diet of the poor is oaten bread, potatoes, milk, herrings, &c. The little farmers generally have meat once a week in ſummer,

ſummer, and ſalted for winter. All keep cows, pay for ſummer grazing 1l. 7s. and buy hay for the winter to the value of 1l. 10s. They all keep pigs, not much poultry. Their fuel both turf and coals; coals 13s. a ton. Car, horſe, and driver, a day, 1s. 4d. A new car 40s. to 3l. A plough 10s. 6d. A harrow 15s.

A weaver, who generally ſows what they call half a peck of flax-ſeed, which is a common peck, gave me the following account of the expenſe.

	£.	s.	d.
Seed 3 buſhels to 1¼ acre, Cunningham-meaſure	0	2	6
Ploughing	0	1	0
Weeding	0	0	9
Pulling 1½ woman, at 8d.	0	1	0
Rippling 1 man, 2 days, at 10d.	0	1	8
Watering 1 man, half a day	0	0	5
Car and horſe	0	0	8
Taking out 1½ man, a day, and 1 woman ditto	0	0	9
Beetling 1 man, 2 days	0	1	8
Carrying to ſcutch mill	0	1	0
Scutching, 1s. 4d. a ſtone, 3 ſtone	0	4	0
Carrying back	0	0	6
Hackling 1s. 4d. ditto	0	4	0
Rent	0	2	0
No tythe of flax.			
	£. 1	2	9
At 2½ pecks to a rood this is, per Cunningham acre, about	9	0	0

Eight pound of flax, and three of tow, worth 6d. or ſtone, rough; make 30 hanks of yarn for a 1400 linen: one woman will ſpin it in 30 days, and earn 4d. a day. 42 hanks make a web of 25 yards, which is wove in 2 weeks, and he earns 5d. a yard or 4½d. and will ſell green for 17½d. or 18d. a yard. Not a bleaching green in all Ards for want of water. All along the coaſt of Ards and in Strangford Loch, ſea wrack is collected by the country people with great diligence, for burning into kelp; it yields at preſent from 40s. to 50s. a ton, the bleach greens have much of it, and the reſt of it exported to England. Some gentlemen, who keep their ſhores in their own hands, pay the men 20s. a ton for collecting and burning: at other times they pay rent for the ſhore. In Loch Strangford the kelp is better than on the open ſhore: an inſtance of induſtry in this Loch deſerves to be recorded. It is not uncommon for the men to draw ſtones from their fields, and ſpread them on the ſhores in order to make the wrack *(fucus)* grow; a good crop being only obtained from rocks and ſtones. Upon the coaſt of Ards, they have in winter much tangle wrack, which they collect very carefully, form into heaps, and when rotten ſpread it on their barley lands, and get very fine crops, but it is not laſting.

The plentifulneſs of the country about Portaferry, Strangford, &c. is very great: this will appear from the following circumſtances, as

as well as the regiſter of butchers meat and common poultry elſewhere inſerted.

Pigeons 2s. a dozen. Rabbits 4d. a couple. The fiſh are, Turbot 4s. Sole 10d. a pair; Bret and Haddock 1d. each; Lobſters 5s. a dozen; Oyſters 19d. a hundred; John Dory, Gurnet; Whiting 4d. a dozen; Mackarel, Mullet, Partridges, and Quails in plenty. Wild Ducks 10d. to 1s. Widgeon 6d. a couple, Barnacle 10d. each; Teal 6d. a couple, Plover 3d.

This country is in general beautiful, but particularly ſo about the ſtreights that lead into Strangford Loch. From Mr. Savage's door the view has great variety. To the left are tracts of hilly grounds, between which the ſea appears, and the vaſt chain of mountains in the Iſle of Man diſtinctly ſeen. In front the hills riſe in a beautiful outline, and a round hill projects like a promontory into the ſtreights, and under it the town amidſt groups of trees; the ſcene is chearful of itſelf, but rendered doubly ſo by the ſhips and herring-boats ſailing in and out. To the right the view is crowned by the mountains of Mourne, which, whenever ſeen, are of a character peculiarly bold, and even terrific. The ſhores of the Loch behind Mr. Savage's are bold ground, abounding with numerous pleaſing landſcapes; the oppoſite coaſt, conſiſting of the woods and improvements of Caſtle-Ward, is a fine ſcenery.

July 30th, croſſed the ſtreights in Mr. Savage's boat, and breakfaſted with Mr. Ainſworth, collector of the cuſtoms; he gave me the following particulars of the barony of Lecale, of the huſbandry of which I had often heard as ſomething better than common. The ſoil varies near the ſea, ſtoney loam, dry ſound good land, ſome without ſtone between the rocky hillocks, ſome very ſtoney; the land is light, as may be judged from two horſes being uſually in a plough, lets on an average from 12s. to 28s. average 20s. the whole county 10s. The meaſure the plantation acre. The ſouth coaſt is the richeſt. Farms riſe from 5 to 30 acres; the little ones are all manufacturers: there are ſome of 30, and perhaps 40, that are not weavers, but moſt of them employ looms. The diviſion of farms among the ſons, have brought them ſo low that they have been obliged to weave for ſubſiſtence. In the richer parts they ſummer fallow, and the courſe then is:

1. Fallow.
2. Wheat, average produce 18 cwt.
3. Barley ditto, a ton per acre.
4. Oats ditto, 4 hhds. each, 12 buſhels.
5. Peaſe.
6. Barley.
7. Clover (of which they ſow much) for 2 years.
8. Barley.
9. Oats.
10. Wheat.

1. Potatoes

1. Potatoes 400 buſhels.
2. Barley, one ton and a half.
3. Barley.
4. Clover for 2 years, much of it ſoiled in the ſtable, a practice which increaſes.

Alſo,

1. Plough-lay for oats.
2. Wheat.
3. Barley.
4. Clover or peaſe.

1. Potatoes.
2. Flax.
3. Barley.
4. Barley.
5. Clover two years.

Have lately got into the way of eating down a 3 year old lay, and plough it in July, and once or twice more for wheat: but to ſow ſuch with peaſe or beans on one earth, and then take the wheat, would be much better. Peaſe eſteemed a refreſhment, and enables them to have one or two crops of white corn. Great quantities of barley ſown, being their principal crop. No turnips. Their manures are marle, ſhells, ſea-wrack. Marle has been uſed greatly for many years, it is ſaid for above 60: it is white marle from the bottom of bogs, and ſome of it immediately under the ſurface; they carry it on horſeback in bags, which hold each 4 buſhels, and they lay about 450 to 500 bags per acre. When the farmer has

has not marle on his own ground, he purchaſes it from his neighbour, and pays from 1l. 1s. to 1l. 10s. for liberty to raiſe it, and if they carry it a mile, or a mile and an half, it coſts them 6l. an acre. They are reckoned very much to have exhauſted their land; for upon the credit of marling they will take 20 corn-crops running, and as a proof of this I was told, that the Deanery of Down, which conſiſts of tythes in Lecale, was 2,200l. a year, 35 years ago, whereas it is now no more than 1600l. owing to the decline of the Lecale crops; and this from the abuſe of marle. Second marlings do not ſucceed, they think, but it has not been tried. Lime they uſe only on dry lands, and not often. They have the ſtone from Carlingford, and they burn it with coals; it coſts them 11d. a barrel, lay from 80 to 150: the lighter the land, the leſs they lay on it: it laſts 8 or 9 crops; does upon old marled lands better than a ſecond marling. Sea ſhelly ſand and gravel they have upon their own ſhore; lay them thick on ſtiff reddiſh clay ſoils, and find great effect from them; lay greater quantities much than of marle, about 800 one-horſe loads, the beſt crops in the barony are gained by it. Parts by ſhelling advanced, from 5s. to 25s. an acre. Very little graſs land, and ſcarce any cattle but cows to every farm for convenience. The farmers are generally not only in Lecale, but the whole county much better and wealthier than formerly.

Tythes

Tythes generally compounded 2s. 2d. an acre for all under crops. The price of provisions has risen in general one-third in 20 years. And a cow which 40 years ago, was bought for 25s. is now 5l. 5s. and as good a horse, 25 years ago, for 4 to 5l. as now sold for 10l to 12l.

There are some cotters who have not farms, only a potatoe garden, a patch of flax, grass for a cow, and a little straw for the winter, for all which they pay 2l. 2s. a year. Rise in the price of labour from 4d. and board to 5d. and 6½d. and ditto in 20 years. The fuel generally coals, which are 13s. to 18s. a ton, and they send their children to pick up dung to burn; yet this is the country that I have heard commended for husbandry. Building a mud farm-house 8l. Ditto stone and slate 30l.

The linen manufacture is carried on very generally through the barony. In Downpatrick there are 500 webs sold every week, at 1s. 1d. a yard, and 26s. each, being from 800 to 1400, in general 1200 linen; which 1200 web will take 38 hanks of 4 hank yarn, and a woman will on an average spin the 38 hanks in as many days, being paid 4d. a hank; a weaver will make it in a fortnight, and has 10s. for it.

Upon the marling coming in, there was a corn-coasting trade opened from Strangford, and it flourished considerably, but fell off pretty

ty much, as has been mentioned with reſpect to the deanery of Down. The trade has, however, been upon the increaſe for about 4 years; from the 11th of September, 1775, to July the 1ſt, 1776, there were 100 cargoes of wheat and barley, about 50 tons each on an average, to Liverpool, Whitehaven, Liſbon, &c. and to Dublin. Two-thirds to Dublin, and one-third foreign, which export received the bounty. The export both foreign and coaſting, in 1774, nearly the ſame as 1775. In 1773 about 75 cargoes: in 1772, 60 to 70. The trade in general of Strangford, export, import, ſhips and ſeamen, has been in general increaſing for 10 years laſt paſt; but the year ending the 25th of laſt March higher than ever it was before, having every year been in a regular gradation. The decline of 1772 and 1773, in the linen manufacture, &c. not felt in the trade of this place.

To the port of Strangford, which includes Downpatrick, Dundrum, Killilea, Killoch, Portaferry, Comber, and Newtown, there belong 30 veſſels, from 35 to 150 tons burthen, beſides fiſhing veſſels, of which 27 ſail received the bounty in 1775: the ſame number in 1774, in 1772 twenty-three. The burthen of the veſſels in 1775 from 28 to 75 tons, and the bounty about 700l. All up the channel, to Strangford and Killilea, and into the Loch, there is 30 feet water, and on the bar there is as much in the loweſt ſprings. A ſhip of 100 guns might lie within 15 yards of the ſhore.

Called

Called at Lord Bangor's at Caſtle Ward, to deliver a letter of recommendation, but unfortunately he was on a ſailing party to England; walked through the woods, &c. The houſe was built by the preſent Lord. It is a very handſome edifice with two principal fronts, but not of the ſame architecture, for the one is Gothic, and the other Grecian. From the temple is a fine wooded ſcene; you look down on a glen of wood, with a winding hill quite covered with it, and which breaks the view of a large bay: over it, appears the peninſula of Strangford, which conſiſts of incloſures and wood. To the right, the bay is bounded by a fine grove, which projects into it. A ſhip at anchor added much. The houſe well ſituated above ſeveral riſing woods, the whole ſcene a fine one. I remarked in Lord Bangor's domains, a fine field of turnips, but *unhoed*. There were ſome cabbages alſo.

I took the road to Downpatrick, through a various country; Down Bay is on the left, and exhibits an amazing variety of iſlands, creeks, and bays, which appear among cultivated hills in a moſt picturesque manner. Here I ſaw ſheep grazing in a ditch, confined by a line faſtened by two pins, and drove into the ground, and paſſing through rings which hung from a ſtrap round their necks, ſo that they could move only from one end to the other.

To

To Redemon, the ſeat of Arthur Johnſton, Eſq; got there late in the evening, but being abſent, I deſired the ſervants to give me a bed, dreading being caught again at a village cabbin.

July 31ſt, to Saintfield. Rents are 10s. 6d. an acre. Several bogs here; one in particular half cultivated, the reſt unimproved; fine oats, potatoes, and barley, were on it. One piece of oats ſhoots directly into the uncultivated part, and ſhews plainly what might be done with all the bogs of this country.

Reached Belfaſt in the forenoon, and was then fortunate enough to meet with Mr. Holmes, alſo a letter from Doctor Haliday, who being abſent himſelf recommended me to ſeveral other gentlemen. Gained upon the whole the information I wiſhed; it conſiſted of the following particulars.

The imports of Belfaſt conſiſt in rum, brandy, geneva, and wines. Till within theſe two years much grain, ſince that none, but have on the contrary exported ſome. Coals from Britain. Iron, timber, hemp, and aſhes, from the Baltic. Barilla from Spain for the bleach greens. Tea, raw ſugars, hops, and porter the principal articles from Great Britain. From North America, wheat, ſtaves, flour, and flaxſeed, all which cut off at preſent. The exports are beef, butter, pork, to the Weſt-Indies, and France. The great article linen cloth

cloth to London; formerly ſome to America. The balance much in favour of the place. Derry, Newry, and Belfaſt. the linen export towns; two thirds from Belfaſt, a little from Derry, the reſt from Newry. There are three ſugar houſes here. The number of ſhips belonging to Belfaſt about 50 ſail from 20 to 300 tons. A veſſel of 200 tons, half loaded, may come to the Quay, there being 9 and a half to 10 feet water; larger veſſels lay 2 miles and a half down. The trade of Belfaſt was at its height in 1770; 1771, 1772, and 1773, were the worſt years; 1774, and 1775 it has been mending; but 1774, and 1775 not equal to 1770, and 1771, by one third. It is curious to ſee from hence how the trade of this place has vibrated with the linen manufacture, that being juſt the account I have received of the progeſs of that fabrick. Calculated that the trade of Belfaſt in general encreaſed one third in fifteen years, ending in 1770, or 1771. The number of people ſuppoſed to amount to from 12 to 15,000. Belfaſt being the place from whence the emigrations were the greateſt, I made many enquiries concerning them, and found that they have for many years had a regular emigration of about 2000 annually, but in 1772 the decline of the linen manufacture encreaſed the number; and the ſame cauſe continuing in 1773 they were at the higheſt, when 4000 went. In 1774 there were but few; and in 1775 there were none, nor any ſince. Some that went had property, and ſo had ſome of thoſe that always went. In general

neral they were the moſt idle and worthleſs, and not reckoned any loſs to the country. In 1771 there were 300 looms in Belfaſt, but in 1774 there were only 180.

There is a conſiderable ſlaughter at this place. In 1775 cured 6000 barrels of beef, at 40s. a barrel, in the town; and 5,500 of pork at 50s. The principal part of the grazing land the lower part of Antrim from Ballymena towards Larne, and Ballymony; ſome from Meath and even from Sligo. The hogs from Armagh, Down, and Antrim, weigh on an average 2 cwt. fattened moſtly on potatoes; 6 or 7 years ago they exported 500 barrels of pork. In 1775, 7000. In 1776, it will be 10,000. When oatmeal above 1d. or 1½d. a pound, the poor live entirely upon potatoes and milk; no meat; but herrings in the ſeaſon. Price of proviſions, &c. at Belfaſt are; potatoes 9d. a buſhel, pigeons 6d. a couple, rabbits ditto, ſalmon 2d. a pound, lobſters 6d. plaice three farthings per lb. oyſters 1s. to 4s. per hundred, freſh cod 1d. per lb. barnacle 1s. widgeon 1s. a pair, oatmeal three farthings per lb. lime 1s. per barrel, coals 13s. a ton. Labour the year round 1s. 1s. in the town, 8d. in the country. Seamen 30s. a month, and ſhip proviſions. Spinners earn 3d. a day. Weavers 1s. 1d. they never go for labourers.

Groſs

Groſs cuſtom including exciſe upon tobacco and foreign ſpirits.

1763	£. 32,900
1764	35,700
1765	49,600
1766	53,600
1767	50,800
1768	56,200
1769	51,500
1770	63,600
1771	62,100
1772	58,700
1773	59,900
1774	60,100
1775	64,800

In the year ending the 25th of March 1774, pieces of linen exported 147,218; yards 3,713,822.

	Pieces.
From 1ſt Nov. 1771, to 1ſt May, 1772	85,402
Next half year	91,712
	177,114
Firſt half year	95,228
Second ditto	87,089
Total	183,017

Belfaſt is a very well built town of brick, they having no ſtone quarry in the neighbourhood. The ſtreets are broad and ſtrait, and

and the inhabitants, amounting to about 15,000, make it appear lively and buſy. The public buildings are not numerous or very ſtriking, but over the exchange Lord Donnegal is building an aſſembly room, 60 feet long, by 30 broad, and 24 high; a very elegant room. A card room adjoining, 30 by 22, and 22 high; and a tea room of the ſame ſize. His Lordſhip is alſo building a new church, which is one of the lighteſt and moſt pleaſing I have any where ſeen: it is 74 by 54, and 30 high to the cornice; the iſles ſeparated by a double row of columns; nothing can be lighter or more pleaſing. The town belongs entirely to his Lordſhip. Rent of it 2000l. a year. His eſtate extends from Drumbridge, near Liſburn, to Larne, 20 miles in a right line, and is 10 broad. His royalties are great, containing the whole of Loch Neagh, which is I ſuppoſe the greateſt of any ſubject in Europe. His eel fiſhery at Tome, and Port-New, on the river Ban, lets for 500l. a year; and all the fiſheries are his to the leap at Colraine. The eſtate is ſuppoſed to be 31,000l. a year, the greateſt at preſent in Ireland. Inniſhoen, in Donnegal, is his, and is 11,000l. of it. In Antrim, Lord Antrim's is the moſt extenſive property, being 4 baronies, and 173,000 acres. The rent 8000l. a year, but relet for 64,000l. a year, by tenants that have perpetuities, perhaps the crueleſt inſtance in the world of careleſſneſs for the intereſts of poſterity. The preſent Lord's father granted thoſe leaſes.

Mr.

Mr. Portis of Belfaſt, laſt year ſowed 3 acres 2 roods of flax; let it ſtand till quite ripe, then ſtacked it like corn, and threſhed it in March; produce of ſeed 8 hogſheads, which ſold at 4l. 4s. or 33l. 12s. He watered it then, and went through the whole operation as common. By being kept ſo long, he found it required leſs watering than in the common way. This is not the uſual method of doing it.

Dr.				Cr.			
3 A. 2 R. at 15s. per acre -	2	12	6	By 8 hogſheads of clear ſeed ſold at 4l. 4s. per hogſhead	33	12	0
Ploughing with 2 horſes, plowman and boy, at 4s. 2d. per day, 4 days -	0	16	8	By 896 lb. clean flax ſold at 6d. a lb. -	22	8	0
Harrowing and ſowing, 5s. 4d. and cleaning the furrows, 4s.	0	9	8	Would have ſold for 7d. if it had been judiciouſly managed, by ſuffering it to lay a day or two longer in the water, which would have made the flax finer.			
One hogſhead of ſeed - -	4	0	0				
Reaping -	1	6	0				
Stacking, thatching and bringing home -	0	15	0				
Expenſes of watering, drying, taking to the mill, and cleaning, at 2d. per lb. 896 lb. a large allowance -	7	9	4				
£.	17	9	2				
Net profit -	38	10	10				
£.	56	0	0	£.	56	0	0

Note,

Note, The ground was rather inclined to clay, was ploughed from lay, but received no manure for two years; ploughed about Chriſtmas, furrowed and ſowed the latter end of March, but covered with a ſhovel from the furrows, from an inch to an inch and an half thick.

Some of the expenſes of an acre of common flax near Belfaſt.

	£.		
Rent	1	0	0
Tythe by modus	0	1	0
Seed, hogſhead, or 7 buſhels, at 8s.	2	16	0
Sowing	0	0	6
Ploughing and harrowing	0	8	8
Stones and clods	0	2	2
Weeding, 8 women 1 day	0	4	4
Pulling 20 women	0	10	10
Watering	0	3	3
Taking out and graſs-carrying, drying and beetling	1	1	0
Scutching all at mills 1s. 4d. a ſtone.			
Hackling, 1s. 4d. ditto.	6	7	9

I was informed that Mr. Iſaac, near Belfaſt, had 4 acres, Iriſh meaſure, of ſtrong clay land not broken up for many years, which being amply manured with lime rubbiſh, and ſea ſhells, and fallowed, was ſown with wheat, and yielded 87l. 9s. at 9s. to 12s. per cwt. Alſo that

itſelf. In the progreſs of the heaps, ſpread bog earth on ſome of the layers, to make it burn quicker, but it will do without. The following paper contains the directions by which Mr. Leſly performed the work.

"A CLAY KILN.

This kiln *(See the annexed plate)* is 20 feet by 12, but it may be made longer or ſhorter, according to the quantity you want; it may alſo be of any breadth that will allow men from each ſide to throw clay to the middle. A. A. are the air-pipes in the middle between the ſod walls made, either by cutting a little trench in the ground ſix inches deep, and ſo many broad, covering them with flat ſtones, ſlates or bricks, or by ſtones laid on the ground at the ſame diſtance, and covered in the above manner; the uſe of theſe being to give air to the fire, and make it burn better. The end muſt be brought a foot on each ſide without the ſod walls, and carefully kept from being choaked up with the aſhes or rubbiſh. B. B. are the ſod walls, about 10 or 12 inches thick; they muſt be 3 feet diſtance from each other; the uſe of them is to keep fuel and clay tight, and confine the heat. Raiſe all the ſod walls two feet and an half high, except the ſides next the wind, fill the ſpaces between the walls with turf, furze, wood, or any manner of firing, and thereon lay dry clay 6 or 8 inches thick, very cloſe and even, ſet fire to it on the windward ſide, and then build up that

ſide alſo to the level of the other ſod walls; when the clay begins to look red, throw on more by degrees; the greateſt difficulty is to get the firſt clay well on fire, when that is accompliſhed after the firſt day, it wants no other attendance than to throw on ſome freſh clay morning and evening, and it will continue burning as long as you pleaſe, till you can throw the clay no higher. The clay may be uſed juſt as it is dug out of the pit. The ſod walls on the ends and ſides muſt from time to time be raiſed as high as the clay to keep in the heat; if the fire be too weak, it may be helped by giving it vent by a poker from the top, or if it goes out, it may be renewed by putting in ſome freſh fuel and clay. When you fail to ſupply it with freſh clay, the fire will go out; the clay will then appear like the rubbiſh of a brick-kiln. Lay the ſame quantity of it on your land that you would of dung; but as poor and light land requires more than ſtrong ground, experience muſt determine the exact quantity. The froſt and rain will diſſolve all the large lumps. It will exceedingly enrich your land either for corn, flax, or graſs; it kills all ſprats, *(juncus)* and produces a fine ſweet herbage, that laſts many years. Chuſe the place for your kiln, where the clay is thick and moſt convenient for carriage to your fields that want manure; it will be well worth your pains to burn any clay or earth in this manner (ſand and gravel only excepted); it is a very cheap manure, and hardly inferior to the

the marle, ſhells, lime, ſand or ſea weed, that have enriched all the farmers of this kingdom, who have had ſenſe and induſtry enough to make uſe of them. The beſt kiln 16 feet wide."

Mr. Leſly practiſed the drill huſbandry ſeveral years, in conſequence of the recommendations of Mr. Wynn Baker. He bought of him a complete ſet of tools for the purpoſe, a drill plough, horſe-hoes, &c. and ſpared neither attention or expenſe to give it a fair trial, but found that it would not anſwer at all, and then gave it up. Lucerne by tranſplantation he alſo tried, following Mr. Baker's inſtructions exactly; but that did no better than the other, and he ploughed it up.

In cattle, Mr. Leſly has been equally attentive; he procured one of Mr. Bakewell's bulls two years ago, and has bred many calves by him, but they are not yet of an age to judge of the merit of the breed: the bull is a very fine one. In draining he has made conſiderable exertions, principally by hollow ones. Mr. Leſly's granary is one of the beſt contrived I have ſeen in Ireland; it is raiſed over the threſhing floor of his barn, and the floor of it is a hair-cloth for the air to paſs through the heap, which is a good contrivance. The whole building is well executed and very convenient, and contains two large bullock ſheds.

The common huſbandry around Leſly Hill is like that of the reſt of the manufacturing part of Ireland. The country is in very ſmall diviſions, of from 5 to 30 acres, and the rent upon an average 12s. Rent of the whole county not 5s. Londonderry not ſo much.

1. Potatoes.
2. Flax.
3. Oats.
4. Oats.
5. Weeds for 2 years, called a lay.

1. Potatoes.
2. Barley.
3. Oats.
4. Oats.
5. Weeds for 2 years.

An acre of potatoes.

Rent		1	12 0
Three bolls ſeed, 30s.		1	10 0
Dung, 160 loads, at 3d.		2	0 0
Spreading, planting, and trenching		1	5 0
No weeding becauſe lay ground.			
Taking up, &c.		2	0 0
	£.	7	7 0

PRODUCE.

320 Buſhels at 1s.		16	0 0
Expenſes		7	7 0
Profit	£.	8	13 0

Prime coſt 5½d. per buſhel.

A man, his wife and 4 children, will eat 4 buſhels a week. If they live upon oatmeal, they will eat 40lb. or 2 buſhels of oats. Average price of oatmeal 2s. 2d. a ſcore pounds. Of barley ſow 3 buſhels and get 70. Of oats they ſow 7 buſhels and get 40 the firſt crop, and 30 the ſecond, and if they run a third crop, not more than 20. A little lime uſed.

Expenſe of an acre of flax.

Rent 3s. for 10 perches twice ploughed and harrowed		2	12 0
Tythe		0	8 0
4 Buſhels of ſeed		2	0 0
Taking off ſtones and clods		0	2 8
Weeding		0	8 0
Pulling		0	4 0
Laying in water		0	2 8
Taking out and graſſing		0	8 0
Lifting and drying with fire		0	16 4
Beetling and ſcutching, 16 ſtone, at 1s. 4d.		1	1 0
Hackling ditto		1	1 0
	£.	9	3 8

The

The ſtone of flax will, after hackling, be 5lb. and 3lb. of tow.

Flax per acre, 80lb. at 1s. 1d.	-	-	-	4	6	8
48 Pound of tow, 6d.	-	-	-	1	4	0
			£.	5	10	8

Expenſes	-	9	3	8
Produce	-	5	10	8
	£.	3	13	0

This account ſurprized me ſo much, that I repeated the enquiry, and had it confirmed. The flax is, however, generally ſown on their own land, and in that caſe only the common rent to be reckoned. The 5lb. of flax will ſpin into 9 hank yarn 45 hanks, and a woman will ſpin 4 a week, the price for ſpinning 6d. a hank. If they are hired, they are paid 3l. a year and board. Of theſe 9 hank yarn, the cloth made takes 50 hanks to a web of 25 yards, but they make double webs generally of twice that length: of 7 hank yarn a web of 48 yards, 32 inch wide, will take 88 hanks; a man weaves it in 15 days, is paid 25s. and ſells it for 3s. a yard green. The tow is ſpun into 2 hank yarn, and wove into coarſe cloth.

The

The food of the poor people is potatoes, oatmeal, and milk. They generally keep cows; ſome of them will have a quarter or a ſide of beef in winter, but not all. Upon the whole, they are in general much better off than they were 20 years ago, and dreſs remarkably well. The manufacture is at preſent very flouriſhing. When the price of cloth is low or bad, numbers of weavers turn labourers.

The emigrations were conſiderable in 1772 and 1773, and carried off a good deal of money, but it was chiefly of diſſolute and idle people: they were not miſſed at all. There is ſome land yet in the rundale way, but 20 years ago much more; alſo change-dale, which is every man changing his land every year.

Rents have fallen, in 4 years, 3s. an acre, and are but juſt beginning to get up again. Land ſells at 21 years purchaſe. Labour has riſen, in 20 years, from 5d. to 9d. No riſe in the price of proviſions in 20 years, or very little. The religion ten to one Preſbyterians.

Auguſt 4th, accompanied Mr. Leſly to his brother's at ——————, within 3 miles of the Giant's Cauſeway, where I had the pleaſure of learning ſeveral particulars concerning the country upon the coaſt. They meaſure by the Cunningham-acre, and rents

are

are on an average 12s. Along the coaſt there is a tract of clay at from 14s. to 20s. The courſes of crops;

1. Potatoes.
2. Barley.
3. Oats.
4. Oats.

1. Potatoes.
2. Barley.
3. Flax.
4. Oats.
5. Oats, and then lay out for 2 years.

Much of the country is in the rundale and likewiſe in the change-dale ſyſtem. The little farmers are all weavers, who weave 10 or 1200 linen, and ſpin great quantities of yarn for the Derry market. Oatmeal and potatoes are the general food of the lower people, who reckon that one barrel of potatoes, to live on, is equal to 2 buſhels of meal. One barrel will laſt a family of ſix eight days, and coſts on an average 3s. 6d. or 4s. Oatmeal 1s. 2d. to 3s. 6d. the 20lb. but 1½d. per lb. on an average. One buſhel of oats yields 18lb. of meal. The oats are dried at home with turf on kilns, which coſt from

from 3l. to 5l. they are then ſent to a mill to be ſhelled, in which operation they loſe half; after which they are ground; the landlord appoints the mill, and they pay 22d. for it.

The average crop of potatoes is 300 buſhels on the Cunningham acre, which is 259 to the Engliſh. The account they ſtate thus:

Rent		0	15 0
County ceſs		0	0 6
Seed, 30 buſhels, at 1s.		1	10 0
300 Load of dung, at 2d.		2	10 0
Putting in 40 men a day, at 6d.		1	0 0
Weeding		0	10 0
Digging, &c. &c.		2	0 0
	£.	8	5 6

PRODUCE.

300 Buſhels, at 1s.		15	0 0
Expenſes		8	5 6
Profit	£.	6	14 6

Prime coſt, per buſhel, 6¼d.

They

They are, however, ſometimes ſo low that, inſtead of profit, the account is a loſing one; laſt year they were 4d. a buſhel, and in Coleraine 3d. Oats are now 1s. a buſhel; ſeveral thouſand buſhels have been exported from Coleraine to London at that price.

There is a conſiderable ſalmon fiſhery on the coaſt; the fiſh are cured in puncheons with common ſalt, and then in tierces of 42 gallons each, 6 of which make a ton; and it ſells at preſent at 17l. a ton, but never before more than 16l. average for 10 years 14l. This riſe of price is attributed to the American ſupply of the Mediterranean with fiſh being cut off.

Rode from Mr. Leſly's to view the Giant's Cauſeway. It is certainly a very great curioſity, as an object for ſpeculation, upon the manner of its formation; whether it owes its origin to fire, and is a ſpecies of lava, or to chryſtalization, or to whatever cauſe, is a point that has employed the attention of men much more able to decide upon it than I am; and has been ſo often treated, that nothing I could ſay could be new. When two bits of theſe baſaltes are rubbed together quick, they emit a conſiderable ſcent like burnt leather. The ſcenery of the Cauſeway, nor of the adjacent mountains, is very magnificent, though the clifts are bold; but for a conſiderable diſtance there is a ſtrong diſpoſition

in

in the rocks to run into pentagonal cylinders, and even at Bridge, by Mr. Leſly's, is a rock in which the ſame diſpoſition is plainly viſible. I believe the Cauſeway would have ſtruck me more if I had not ſeen the prints of Staffa.

Returned to Leſly Hill; and Auguſt 5th, departed for Coleraine. There the right hon. Mr. Jackſon aſſiſted me with the greateſt politeneſs in procuring the intelligence I wiſhed about the ſalmon fiſhery, which is the greateſt in the kingdom, and viewed both fiſheries above and below the town, very pleaſantly ſituated on the river Ban. The ſalmon ſpawn in all the rivers that run into the Ban about the beginning of Auguſt, and as ſoon as they have done, ſwim to the ſea, where they ſtay till January, when they begin to return to the freſh water, and continue doing it till Auguſt, in which voyage they are taken; the nets are ſet the middle of January, but by act of parliament no nets nor weirs can be kept down after the 12th of Auguſt. All the fiſheries on the river Ban let at 6000l. a year. From the ſea to the rock above Coleraine, where the weirs are built, belongs to the London companies; the greateſt part of the reſt to Lord Donnegal. The eel fiſheries let at 1000l. a year, and the ſalmon fiſheries at Colerain, 1000l. The eels make periodical voyages, as the ſalmon, but inſtead of ſpawning in the freſh water, they go to the ſea to ſpawn,

and

and the young fry return againſt the ſtream; to enable them to do which with greater eaſe at the leap, ſtraw ropes are hung in the water for them; when they return to ſea, they are taken: many of them weigh 9 or 10lb. The young ſalmon are called *grawls*, and grow at a rate which I ſhould ſuppoſe ſcarce any fiſh commonly known equals; for within the year ſome of them will come to 16 and 18lb. but in general 10 or 12lb. ſuch as eſcape the firſt year's fiſhery are *ſalmon*; and at 2 years old will generally weigh 20 to 25lb. This year's fiſhery has proved the greateſt that ever was known, and they had the largeſt hawl, taking 1452 ſalmon at one drag of one net. In the year 1758, they had 882, which was the next greateſt hawl. I had the pleaſure of ſeeing 370 drawn in at once. They have this year taken 400 ton of fiſh; 200 ſold freſh at 1d. and 1½d. a lb. and 200 ſalted, at 18l. and 20l. per ton, which are ſent to London, Spain, and Italy. The fiſhery employs 80 men, and the expenſes in general calculated to equal the rent.

The linen manufacture is very general about Coleraine, coarſe ten hundred linen. It is carried to Dublin in cars 110 miles, at 5s. per cwt. in ſummer, and 7s. 6d. in winter.

Rents in Derry 10s. 6d. the Iriſh acre; and farms from 6 to 15 acres. The emigrations from this neighbourhood were in general of idle,

idle, looſe, diſorderly people. It is at preſent, I was informed, too populous; and if the emigrations are not renewed, the ill effects will be ſeverely felt. The whole county of Derry belongs to the London companies and the Biſhop, except ſome trifling properties. There is a little trade at Coleraine in hides, butter, and fiſh, ſome meal is imported, which ſounds ſtrange after hearing that ſo many oats had been exported.

Mr. Jackſon has made great improvements to his houſe, which is ſituated in a very pretty domain of 85 acres on the banks of the river, and all the timber he has uſed is out of his bog; he gets very large oak and fir trees: they are found 20 feet deep, and all lie exactly eaſt and weſt.

Auguſt 6th, to Newtown-Limmavaddy; went by Magilligan, for the ſake of ſeeing the new houſe building on the ſea coaſt, by the biſhop of Derry, which will be a large and convenient edifice, the ſhell not finiſhed; it ſtands on a bold ſhore, but in a country where a tree is a rarity.

At Magilligan is a rabbit warren, which yield on an average 3000 dozen per ann. laſt year 4000 and 5000 have been known. The bodies are ſold at 2d. a couple; but the ſkins are ſent to Dublin at 5s. 7d. to 6s. a dozen, ſelling from 1500l. to 1800l. a year. The warren

warren is a ſandy tract on the ſhore, and belongs to the biſhop. I was informed, that at Hornhead in Donnegal, Mr. Stewart has a warren of ſand 25 miles long. Mr. Smith of Newtown-Limmavaddy gave me the following particulars of that neighbourhood. Farms riſe ſo high as 60 to 70 acres, and a few to 200, in general about 40 acres; many weavers patches at 3 or 4, but the farmers themſelves have yarn ſpun in their houſes, which they give to the weavers to make into cloth: the farmer himſelf attending to nothing but the management of his land. This appears to me a ſign that I ſhall ſoon quit the linen country; for theſe are more of farmers than any ſet I have met with for ſome time. Rents for a few miles about the town, not including the town parks nor mountain, are at 5s. the parks 30s. the mountains are in great quantities, more than of cultivated land; and all they do is to raiſe ſome young cattle upon them and feed ſome ſheep. The 5s. are old rents, but new are 10s. which is the general average, Cunningham meaſure: of the whole county on an average not more than 4s. including bog and mountain.

1. Potatoes, value on an average 10l.

2. Barley, 3 bolls, at 12 buſhels.

3. Oats, worth 50s.

4. Oats.

4. Oats.
5. Flax.
6. Lay 2 or 3 years, ſome ſow graſſes, clover, &c.
7. Oats.
8. Oats.

Manures are ſhells from the Loch ſhore and lime; lay 60 barrels of ſhells per acre, at 1s. a barrel on the land, will laſt from 5 to 7 years; the effect very great. Prefer it to lime for light land; but for deep clay ground lime beſt: of which 100 barrels, at 1s. More ſhells uſed than lime. Mountains beginning to be improved; they pay up to 1s. 6d. an acre; lime at 120 barrels an acre; ſow oats in ſucceſſion; as long as the land will bear them, get pretty good crops, but late: the ſoil is very wet, but they drain it with ditches.

The linen manufacture is from 10 hundred to 16. They raiſe their own flax; the crops 28 ſtone per acre; after ſcutching worth 5s. 4d. a ſtone.

Rent

Rent of an acre twice ploughed and harrowed	2	12	0
Seed, 4 buſhels, at 12s.	2	8	0
Clods and ſtones	0	2	0
Weeding	0	2	0
Pulling, 10 women, at 8d.	0	6	8
Carrying to water	0	5	0
Taking out and graſſing	0	5	0
Lifting and carrying	0	4	0
Drying 10 kiſhes turf, 10s. labour 2s.	0	12	0
Beetling at home 16 women, at 8d.	0	10	8
Scutching 1s. 4d. a ſtone	1	15	4
Hackling 8d. ditto	0	17	8
£.	10	0	4

The yarn from two to ten hanks a lb. generally four; ſpin a hank a day: are hired for it at 3l. 3s. a year; if done in the cabbin, are paid from 4d. to 4½d. a hank. The poor live on potatoes, milk, and oatmeal, with many herrings and ſalmon; very little fleſh. In ten or fifteen years, their circumſtances are improved; they live and dreſs better, and have better cabbins.

The

The emigrations were very great from hence of both idle and induſtrious, and carried large ſums with them. Not too populous at preſent. They have a great ſpirit of dividing their farms, however ſmall, from which many inconveniencies ariſe; the farmers will do the ſame with their farms. Rents have fallen, in 5 years, 3s. 6d. in the pound, and are ſtill rather upon the decline. The manufacture flouriſhes moſt when oatmeal is not lower than 1d. a lb. A buſhel of potatoes is reckoned equal to 20 lb. of oatmeal.

From Limmavaddy to Derry there is very little uncultivated land. Within 4 miles of the latter, rents are from 12s. to 20s. mountains paid for but in the groſs. Reached Derry at night, and waited two hours in the dark before the ferry-boat came over for me.

Auguſt 7th, in the morning went to the Biſhop's palace to leave my letters of recommendation; for I was informed of my misfortune in his being out of the kingdom. He was upon a voyage to Staffa, and had ſent home ſome of the ſtones of which it conſiſts; they appeared perfectly to reſemble in ſhape, colour, and ſmell, thoſe of the Giant's Cauſeway. I felt at once the extent of my loſs in the abſence of his lordſhip, who I had been repeatedly told was one of the men in all Ireland the moſt able to give me a variety of uſeful information, with at the ſame time the moſt liberal ſpirit of communication.

Waited on Mr. Robert Alexander, one of the principal merchants of Derry, who very obligingly took every means of procuring me ſuch information as I wanted; rode with me to Loch Swilly for viewing the ſcene of the herring fiſhery, and, aſſiſted by the Rev. Mr. Barnard, gave me the following particulars concerning it.

In the barony of Inniſhoen, the courſes are, 1. Barley 8 barrels; 2. oats 10; 3. oats 6; 4. lay for 3 years.

1. Oats; 2. oats; 3. oats; 4 lay 3 years.

1. Potatoes on lay; 2. barley; 3. oats 10 barrels; 4. oats 6; 5. oats 5; 6. lay 3 years.

1. Potatoes 10l. 2. barley; 3. oats; 4. oats; 5. flax 4 Cwt.

Barley the principal crop, and generally worth 5l. to 6l. Rent of the whole peninſula to lord Donnegal 11,000l. and to the occupying tenant 22,000l. The meaſure is the plantation acre. The bottoms of Inniſhoen 20s. an acre: the whole county of Donnegal not 1s. The linen is getting in but very ſlowly, but ſpinning very general, and the beſt yarn in all the north: they ſpin all their own flax, and generally into 3 hank yarn; which all goes to Derry, and from thence to Manchester. The ſpinners ſpin a hank a day: a pound of flax worth 6d. ſpins into 3 hanks, which ſell at preſent

preſent at 1s. 9d. which is 5d. a day earning, but in common only 4d. Flax yields per acre ſcutched 3½ Cwt. at 6½d. per pound. ſells on foot at 6l. to 8l. expenſes per acre, ſcutching included, 5l. 14s.

The iſle of Inch belongs to Lord Donnegal; 300l. rent, and 6000l. fine, and the occupying tenants pay 1,100l. a year, there are 2000 acres. The ſize of farms in Inniſhoen are from 10 to 20 acres, with a run on the mountains for cattle. They have lime ſtone in many parts of the country, ſhells in great plenty in the lochs, which ſell at 3d. a barrel for burning into lime; other rotten ſhells in whole banks for manure, which they uſe much, laying 40 barrels per acre. The ſoil a ſlaty gravel mixed with clay, with ſprings: the effect of the ſhells not great, except upon mountain land drained, where they throw up white clover. There is a fall in the rent of lands in 4 or 5 years. Religion generally roman catholic. Sea weed much uſed for potatoes; and excellent for garden cabbages.

Rowed frow Fawn to Inch Iſland acroſs the loch, the ſcenery amazingly fine, the lands every where high and bold, with one of the nobleſt outlines any where to be ſeen. Inch is a prodigiouſly fine extenſive iſland, all high lands, with cultivation ſpreading over it, little cluſters of cabbins with groups of wood: the water of a great depth: and a ſafe harbour for any number of ſhips: here is the great reſort

of veſſels for the herring fiſhery; it begins the middle of October, and ends about Chriſtmas; it has been 5 years riſing to what it is at preſent; laſt year 500 boats were employed in it: the farmers and coaſt inhabitants build and ſend them out, and either fiſh on their own account, or let them; but the latter moſt common. Five men take a boat, each man half a ſhare, each net half and the boat a whole one. A boat coſts 10l. on an average, each has 6 ſtand of nets at 2l. In a middling year each boat will take 6000 herrings a night, during the ſeaſon, 6 times a week, the price on an average 4s. 2d. a 1000 from the water, home conſumption takes the moſt, and the ſhipping which lies here for the purpoſe the reſt.

The ſhips on the ſtation for buying are from 20 to 100 tons, and have the bounty of 20s. a ton.

By the act they are to be built ſince the year 1776, each has one or two boats for fiſhing; alſo for the firſt 20 tons they muſt have 8 men, and 2 to every 8 ton above 20. The merchants who have the ſhips, both buy of the country boats and fiſh themſelves: they both cure for barrel and in bulk that is ſalted in the hold of a ſhip; a ton of ſalt will cure 10,000 herrings, 500 herrings in a barrel of thoſe of Loch-ſwilly, but 800 at Killybegs. They made their own barrels of American ſtaves, but now of fir; 1000 ſtaves, Philadelphia, will

will make 8 ton or 64 barrels, and the price 6l. the 1000, making 11d. each barrel, 20 hoops to the barrel, at 6d.

500 boats, laſt year, at 5 men	£. 2,500
Men on ſhore ſalting - -	300
In gutting a little boy, 10 or 12 years old, at a halfpenny a 100, will earn 10d. a day.	
60 ſhips, at 10 men - - -	600

Twine of a 40s. ſtand of nets, 20s. therefore 20s. for labour; 27lb. of flax, ſpun into 16 or 18 lb. of twine, make a ſtand.

Mr. Alexander began the fiſhery in 1773, when he employed two ſloops only, each of 40 tons. In 1774, he employed the two ſloops and a brig of 100 tons, the latter of which he ſent to Antigua with 650 barrels, beſides what he ſold at home, and loaded the ſloops in bulk for the coaſt trade. In 1775, he had the ſame brig and three ſloops, and loaded all four in bulk for the coaſt trade; one of which on her voyage was put aſhore at Black Sod, in the county of Mayo; and though the ſloop was not the leaſt injured, the country came down, obliged the crew to go on ſhore, threatening to murder them if they did not, and then not only robbed the veſſel of her cargo, but of every portable material. The cargo was 40 ton, or 160,000 herrings. Beſides what was ſent coaſtwiſe this year, he exported on board his ſhip, the Alexander, 340 tons, not in the herring

herring trade. 1750 barrels to the Weſt-Indies. Here has been a vaſt encreaſe of the fiſhery in the hands of one perſon, which ſhews clearly what might be done if larger capitals were employed. Mr. Alexander was prevented laſt year from doing ſo much as he might have done, and what he did was at a very great expenſe for want of proper houſes, which are not to be had on Loch Swilly; and in order to remedy this inconvenience, has this year, 1776. built on the point of Inch Iſland, called the Downing, a complete ſalting-houſe, conſiſting of a range of houſes for all the operations, divided into four apartments, one of 20 feet by 18 a ſtore-room for coarſe ſalt, which will hold 150 to 200 tons; another of the ſame dimenſions for fine ſalt; a third for receiving the herrings from the boats and gutting them, of the ſame ſize; and a fourth for a cooper's ſhop. Theſe apartments all communicate with a ſecond range, 80 by 18, which is filled with veſſels for ſtriking the herrings, that is, putting them for ſalt for 10 or 12 days; this communicates with a third houſe, 80 by 14, in which the herrings, being taken from the veſſels above mentioned, are barrelled and finiſhed off for the ſhips. Beſides theſe there is a dwelling houſe for the clerks, &c. of 28 by 14. All theſe buildings are ſubſtantially erected of ſtone, and covered with ſlate. The finiſhing-houſe contains the boats when not in uſe, and above it is a light loft for the nets. Over the curing-houſe is a large loft for the empty barrels; and over the cooper's ſhop are apartments

apartments for the workmen, and over the gutting-houſe is a hoop ſtore. But the ſalt-houſes are filled to the roof. All theſe buildings Mr. Alexander expects to finiſh completely for 500l. In 1775 there were about 1800 barrels exported beſides Mr. Alexander's. There were that year fiſh enough in the Loch for all the boats of Europe. They ſwarmed ſo, that a boat which went out at 7 in the evening, returned at 11 full, and went out on a ſecond trip. The fellows ſaid it was difficult to row through them; and every winter the plenty has been great, only the weather not equally good for taking, which cannot go on in a ſtormy night. In the buildings above deſcribed Mr. Alexander will be able to ſave 100,000 herrings a day, which will take 10 tons of ſalt, 17 or 18 boats, and 90 men; 6 men to carry from boats to the gutting-houſe; 40 boys, women, and girls to gut; 4 to carry from gut-houſe to curing-houſe; 10 men firſt ſalting and packing; 8 men to draw from the veſſels, and carry to the barreling-houſe; and 10 packing into barrels, which 10 packers will keep 5 coopers employed; 6 men more will be employed in ranging the barrels and pickling off; 8 men more carrying to the ſhip's boats. If 100,000 herrings come in regularly every day, this would be the courſe of the buſineſs. The buildings are in fact, a market to the country boats to reſort to every day to ſell their herrings, as far as the quantity above mentioned extends.

Calculation

Calculation of the expenſes of this buſineſs, ſuppoſing 100,000 *herrings cured every day.*

Buildings, 500l. intereſt of that ſum, at 10 per cent. - - - - - -				50	0 0
This high rate of intereſt is reckoned on account of the precarioufneſs of all herring-fiſheries, as they frequent and forſake ſeas and bays; and if they were to quit Loch Swilly, the buildings would be of little uſe but to let for a trifle as cabbins.					
18 Boats, at 10l. - -	180	0	0		
90 ſtands of nets, at 40s.	180	0	0		
£.	360	0	0		
Intereſt, at 6 per cent. - -				21	12 0
Repairing the boats, 40s. each - -				36	0 0
Ditto nets, they laſt but two ſeaſons				90	0 0
Wages of 90 fiſhermen, at 1s. 6d. a day, 8 weeks - - -				324	0 0
£.				521	12 0

N. B. At this expenſe of fiſhing, the prime coſt of the herrings, ſuppoſe 6000 taken by each boat a night, is 2s. per 1000: but it muſt be obvious that the boats cannot always go out, neither will hired men fiſh for their maſters, as they will for themſelves. Hence the merchant may find it more advantageous to buy at 4s. 2d. than to depend entirely on his own boats,

Wages

				£.		
				521	12	0
Wages of 52 men, at 1s. 1d. a day, 8 weeks - - -				135	4	0
18 boats, 108,000 herrings a day, are 5,184,000; gutting at 5d. per 1000				108	0	0
Salt 10 tons per 100,000, or 518 tons, at 2l. 10s. for the curing houſe.				1295	0	0
Salt 246 tons, 17 cwt. at 2l. 10s. for the barreling houſe				617	2	6
9,874 Barrels, at 8 ton, or 64 barrels to the 1000 ſtaves, will require 154,000 ſtaves, at 7l.	1078	0	0			
164,000 hoops, at 30s.	246	0	0			
Making 1s. 2d. per barrel	575	19	8			
7 nails to every barrel, which is allowing one for accidents, 58,000, at 2s. 2d. -	6	5	8	1906	5	4
Prime coſt, 9s. 5d. a barrel.				4583	3	10
Freight of 9874 barrels to Weſt Indies, at 3s. 4d. - - -				1645	13	4
Duty on export, with gaugers fees, 9d. a barrel - -				370	5	6
				6599	2	8
Inſurance and commiſſion, 3 per cent. on that ſum - -				200	1	5
				6799	4	1
Intereſt on that ſum 8 months, at 6 per cent - -				274	15	2
				7073	19	3

The

The price in the Weſt Indies riſes from 20s. to 30s. ſterling a barrel.

Average 25s.—9,874 barrels at that rate - - -	12342	10	0
Deduct expenſes - - -	7073	19	3
Profit - - -	£. 5268	10	9

But as the herrings are not always to be taken in this manner, that is, 6000 a night by the merchants boats; it will be neceſſary to calculate the buſineſs in the more common way of carrying it on, by buying them of the country boats, at 4s. 2d. per 1000.

Intereſt as before - -	50	0	0
Purchaſe of 5,184,000, at 4s. 2d. per 1000 - - -	1080	0	0
Labour - - -	135	4	0
Gutting - - -	108	0	0
Salt - - - -	1912	2	6
Barrels - - - -	1976	5	4
Prime coſt - -	£. 5261	11	10
Freight - - -	1645	6	8
Duty - - -	370	5	6
	7277	4	0
Inſurance and commiſſion -	218	6	0
	£. 7495	10	0

Intereſt

	£. 7495	10	0
Intereſt on that ſum, at 6 per cent. for 8 months -- -	299	17	2
	7795	7	2
Prime coſt in Weſt Indies 15s. 9¾d. a barrel.			
Sell at - - -	12342	10	0
Expenſes - - -	7795	7	2
Profit - - -	4547	2	10
4546, on the expenſes of 7795, is 58 per cent.—bounty of 2s. a barrel	987	8	0
	£. 5534	10	10

Here appears a very noble profit; but fiſhing upon paper is an eaſier buſineſs than upon Loch Swilly; and it is neceſſary to obſerve, that the merchant who engages in this fiſhery, muſt provide, if he fiſhes himſelf, boats, nets, ſalt, barrels, and ſtores, all which muſt be ready, though not a herring ſhould come into the Loch, or though ſtorms prevent a boat going out. He muſt alſo have the ſum ready in his counting-houſe for all the other expenſes, in caſe the fiſhery proves ſucceſsful, which upon the whole are circumſtances that make great profits neceſſary, or the buſineſs would not be undertaken at all.

The

The inveſtment of 8000l. in this fiſhery employs

	Men	Ships	Tons.
Fiſhermen - -	90	0	0
Gutters - -	40	0	0
Sundries - -	52	0	0
To bring the ſtaves, a ſhip of 200 tons, ſeamen -	16	1	200
764 tons of ſalt, 3 ſhips	50	3	764
9,874 barrels to the Weſt Indies, 1234 tons, 12 ſhips	120	12	1234
	368	16	2198

Beſides boat-building, net making and coopers. And the 90 fiſhermen are a ſure nurſery of ſeamen; much of this great ſyſtem of employment is in the depth of winter, when not demanded for other purpoſes.

Auguſt 8th, left Derry, and took the road by Raphoe, to the Rev. Mr. Golding's at Clonleigh, who favoured me with much valuable information. The view of Derry, at the diſtance of a mile or two, is the moſt pictureſque of any place I have ſeen; it ſeems to be built on an iſland of bold land riſing from the river, which ſpreads into a fine baſon at the foot of the town; the adjacent country hilly, the ſcene wants nothing but wood to make it a perfect landſcape. Paſſing Raphoe, found the huſbandry in the neighbourhood of Clonleigh as follows. The ſoil is for the moſt part light loamy land, with ſingle large ſtones, and very wet

wet with ſprings, with conſiderable tracts of bog. Rents are from 15s. to 20s. the Cunningham acre, and ſome to 25s. and about towns ſome up to 30s. and 40s. Average rent of the whole county not more than 1s. Farms vary from 5 to 40 acres, in general 25 or 30, very many from 7 to 10. They are leſſened by the farmers dividing them among their children. They generally ſow flax, dreſs and ſpin it in their families. When cloth ſells well, they get it wove by the weavers, who are alſo little farmers. At other times they ſell the flax in yarn at market, many of them never having any woven at all. The ſpinners in a little farm are the daughters and a couple of maid ſervants, that are paid 30s. a half year, and the common bargain is, to do a hank a day of 3 or 4 hank yarn. Much more than half the flax of the country is worked into cloth; a great deal of flax is imported at Derry, this country not raiſing near enough for its own manufacture; their own is much the fineſt. Their tillage is exceeding bad, the land not half ploughed, and they like to have much graſs among the corn for improving the fodder. Their courſe is;

1. Potatoes on 3 years lay. 2. Barley 10 barrels. 3. Oats 5 to 12 barrels. 4. Oats. 5. Oats. 6. Lay for weeds 3 years.

1. Potatoes. 2. Barley. 3. Oats. 4. Oats. 5. Flax 480 lb. clean ſcutched, or 30 ſtone.

They

They plant 14 meaſures, each 2 buſhels of potatoe-ſeed an acre, the crop from 8 to 12 ſcore meaſures. The flax I ſaw was nothing but weeds and rubbiſh of all kinds, yet the crop itſelf had an appearance of being good, as if the land was not to blame. As to manuring, they uſe very little more than the trifle they make in their ſtable and cow-houſe. A few uſe lime, but not many; the price is 10d. to 13d. a barrel: a little woollen cloth weaved, but not near enough to cloath themſelves. They import a great deal from Galway. Land ſells at 24 and 26 year's purchaſe. Rents are very much raiſed; but they are fallen within 4 or 5 years; in 40 years conjecture that they are doubled. Tythes are compounded. Oats pay 5s. Barley 7s. Potatoes, flax, and hay, 5s. In ſome places potatoes free. Leaſes uſually for 3 lives. Lord Abercorn only for twenty-one years and no lives, yet his eſtate is well cultivated. The farmers generally re-let ſome of their lands to cottars at a great increaſe of rent. The poor people live upon oatmeal, milk, potatoes, and herrings; but the pooreſt eat very little meat. A farmer of 10l. a year will have a good meal of beef or bacon every Sunday: in general they all live much better than they did formerly. I remarked that the labourers carried with them to their work an oat cake and a bottle of milk. All their milk is kept till ſower, till which they do not make butter. Scarce any ſuch thing as wheeled cars in the country, they are all ſliding ones: a wheeled one 35s. a ſliding one 2s. 6d.

2s. 6d. A plough 10s. 6d. A harrow of wood 1s. 1d. The fuel all turf, and much of it made by hand; a poor man's is 100 barrels a year, and will coſt him 35s. The common people exceedingly addicted to thieving.

Building a cabbin 5l. they are all of ſtone, which is plentiful: clay-mortar inſtead of lime. Almoſt all the farmers have a man-ſervant at 1l. 10s. to 2l. the half year entirely employed in the farm. A farmer of 10l. a year always one. Very little cloth made farther than Ballymaffey, but all over Donnegal much ſpinning.

The county of Tyrone is various; the fineſt parts are about Dungannon, Stewart's Town, &c. on Lake Neagh. From Strabane to Omagh much good; from Omagh to Ardmagh all cultivated. From Strabane to Dungannon almoſt all mountains: rent of the whole 4s. The biſhop of Raphoe is a conſiderable farmer, and cultivates and hoes turnips. The dean has alſo done the ſame.

Mr. Golding has uſed much ſoapers waſte, at 4d. a meaſure of two buſhels, laid them on cold moraſſy ſoils, and found the benefit very great; it brought up quantities of red clover, and deſtroys moſs effectually. Turnips would do excellently here, as beef riſes from one-penny three farthings in November, to three-pence halfpenny and four pence in April. Mr. Golding has uſed Scotch cabbages for bullocks; gene-

generally fats 2 beaſts every year on them. Sows the ſeed early in Auguſt, and tranſplants them in April and May for ſucceſſion; has had them in full perfection in February and March; has tried ſpring ſowings, but they do not come to more than 5 or 6 lb. whereas the Auguſt ſown plants riſe to 35 lb. He has alſo fed ſheep upon potatoes, buys them very forward in October, and puts them to his after graſs to keep their fleſh, and in the ſevere weather gives them the potatoes with great ſucceſs. He took the hint from ſeeing the ſheep walk over the potatoe grounds, and ſcratching up the remaining roots in hard weather. The only evil reſulting from the emigrations was, the money they carried away with them, which was conſiderable.

Auguſt 9th, to Convoy, where I was ſo unfortunate as to find Mr. Montgomery from home; paſſing on to Ballymaffey, I met that gentleman's oxen, drawing ſledge cars of turf, ſingle with collars, and worked to the full as well as the horſes. They deſerved wheels however. On the other ſide of Ballymaffey, it is curious to obſerve, how, as you advance towards the mountains, cultivation gradually declines, it is chequered with heath, till at laſt the heath is chequered with cultivation, ſpots of green, on the mountain ſides, ſurrounded by the dreary wilderneſs; but there are no incloſures. The waſte is exceedingly improvable, all the tract on the left before I came to the lake, and alſo beyond it, might eaſily be made excellent; it is bog, with a great fall every where, extends

extends beyond the lake to the mountain foot, and is from 10 to 20 feet deep; riſes in perfect hills, yet all bog. Lime is to be had here from 6d to 8d a barrel ſix miles off. I had two accounts, one of 6d, and the other of 8d, but clayey gravel is to be had every where on the ſpot. The road leads acroſs the bog, and is made of it. I remarked in ſeveral places, little bogs, forming ſpots of moſs growing on the water, and in ſome places rotting, with other plants growing out of that. Cars may go three or four times a day for lime, and bring three barrels at a time. I was the more attentive to this bog, becauſe it appeared to me to be one of the moſt improveable I had ſeen, and the ſize of it makes it an object worth the attention of ſome ſpirited improver; it is not every where that ſo deciſive a fall is met with for rendering the drains effective; the diſtance from lime is advantageous. Suppoſe a car, 1s. a day, and to bring eight barrels, carriage of it then is 1½d a barrel, and ſuppoſe the lime 7½d, in all 9d, 160, at that price, comes to 6 l. at which rate I am clear it would anſwer to lay any quantity on to ſuch bogs as theſe. I had often heard of roads being made over ſuch quaking bogs, that they move under a carriage, but could ſcarcely credit it; I was, however, convinced now, for in ſeveral places, every ſtep the horſe ſet, moved a full yard of the ground in perfect heaves. Got to a miſerable cabin on the road, the widow Barclay's, which I had been aſſured was an exceeding good inn, but eſcaped without a cold, or the itch.

Auguſt 10th, got to Alexander Montgomery's, Eſq; at Mount Charles, Lord Conyngham's agent, by breakfaſt; found he was ſo deeply engaged in the fiſheries, on this coaſt, that I could not have got into better hands; with great civility he gave me every intelligence I wiſhed; as an introduction to it, he took me a ride to the bays on the coaſt, where the fiſheries are moſt carried on, particularly Inver bay, Macſwine's bay, and Killibeg's bay. The coaſt is perfectly ſawed by bays; the lands are high and bold, particularly about Killibegs, where the ſcenery is exceedingly romantic, and if the multiplicity of hills upon hills, and rocks, were planted, would be one of the moſt beautiful ſpots that can be imagined. The ſtate of the fiſheries may be judged from the number of boats employed in the ſeveral ſtations:

	1775.	1776.
Inver bay	52	72
Killibegs and Fintia	50	60
Tilin and Tawney	47	47
Bruckleſs	20	25
Boylagh and Roſſes	50	50
Cloghanlee	18	18
Dunfanachly	20	25
Sheephaven	30	30
	287	327

For

For a comparison, I insert the following list of seafaring men in Ireland, 1695.

	Seamen.	Fishermen.	Boatmen.	Total.	Papists.
Baltimore	9	188	84	281	268
Belfast and Carickfergus	194	62	12	268	2
Coleraine	48	233	169	450	209
Cork	58	34	91	183	111
Donaghadee, whereof Masters, 35	283	28	2	313	0
Drogheda	22	56	0	78	61
Dublin	42	271	99	412	276
Dundalk and Carlingford	2	90	0	92	51
Galway	42	42	88	172	140
Killibegs	5	120	4	129	78
Kinsale	104	79	45	225	106
Limerick	13	0	137	150	132
Londonderry	56	46	22	124	36
Rosse	20	85	77	182	148
Sligo	11	68	8	87	60
Strangford	69	159	12	240	78
Tralee and Kerry	2	165	0	167	163
Waterford	36	83	50	169	143
Wexford	80	346	0	426	399
Wicklow	22	49	5	76	58
Youghall	40	114	46	200	135
Total	1158	2315	951	4424	2654

In Inverbay only of the above, there is a ſummer fiſhery for herrings, which begins the latter end of July, and ends the beginning of September. All the other places are winter fiſheries, which begin in October, and end early in January, laſting eight weeks. Every boat coſts 18 l. to 20 l. and has ſix ſhares of nets, at 3 l. to 3 l. 3 s. each: the nets all made of hemp, from the Baltic, which coſt, dreſſed, 8d. a pound, fit for ſpinning: 33 lb. of it in a ſhare of nets: 4 d. a pound paid for ſpinning it, or 11s. a ſhare: weaving the nets 1d. a yard for one *fling*, or 63 meſhes deep, 200 yards running meaſure, at that depth, in each ſhare. Six hands in each boat, a ſkipper, and five men. In the common practice, a boat is divided into ſeven ſhares, the boat one; each net, half a one; and each man half: in which way they divide the produce, which vibrates between 10l. and 100l. average 35l. or per week 10s. a man. Theſe boats belong, in general, to the common inhabitants of the country, farmers, &c. The other way of carrying the fiſhery on is, that thoſe who have veſſels on the bounty, fit them out at their own expenſe, and pay the ſkipper 1l. 11s. 6d. a month, and the common men 20s. a month; each a pair of trowſers, at 4s. 6d. feed them with as much potatoes, beef, and pork, as they will eat, and plenty of whiſkey, which all together, comes to 20s. a month. The repairs of the boat and tackling are large, for all are built of fir, they come to 3l. per annum per boat, and the nets, Mr. Montgomery uſes two ſeaſons, and then ſells

ſells them for half price. In this manner of fiſhing, the boats catch each, on an average, 100,000 herrings, which is 1600 herrings a night, but the common boats of the country, not ſo well fitted up, take only 80,000. They are cured in bulk, that is packed into the holds of the veſſels, from 20 to 100 tons each, and are ſold all over the coaſt of Ireland. The quantity of ſalt neceſſary to the 80,000 herrings, which each boat catches, is 7 tons, at the price of 2l. 14s. a ton; this is the price, at which Mr. Montgomery ſells, who has eſtabliſhed conſiderable ſalt-works, making 450 tons annually, and has by this means reduced the ſalt, from 3l. 10s. to 5l. down to 2l. 14s. The veſſels employed on this fiſhery, for the bounty, are from 30 to 100 tons. A veſſel of 100 tons, carries in bulk, 500,000 herrings, or the produce of five boats; theſe calculations are in reference only to the average of nights and ſeaſons; Mr Neſbit's veſſel, of 60 tons, has been loaded by four boats, in three nights, and Mr. Montgomery has taken 100,000 in one night, with two nets, but theſe are extraordinary inſtances. The parliamentary bounty is 20s. a ton, but there muſt be four men for the firſt 20 tons, and one for every 8 tons over, the owners of the veſſels employ no more boats, than to enable them, by the crews, to draw the bounty; and what theſe men are not able to get, they buy of the country boats, at an average of 5s. a 1000, which all are clear, anſwers much better than having boats of their own.

Account

Account of a veſſel of 100 *tons.*

	£.		
Building 2 boats, at 19l.	38	0	0
N. B. The veſſel of 100 tons, will be navigated by 7 men, as there muſt be 14, by the act, to draw the bounty; 7 men muſt be ſupplied by boats, which may be called 2.			
Nets	38	0	0
The boats are 19 to 21 feet keel, 7 feet 4 broad, and 3 feet 4 in depth. The nets are 120 fathom long at the rope, and 7 feet deep.	76	0	0
Building, rigging, and fitting out a veſſel of 100 tons, 700l.			
Intereſt of that ſum, at 6 per cent.	4	10	0
Repairing of two boats	6	0	0
Ditto nets	4	10	0
Wages of 12 men, at 20s. two months £. 24 0 0			
Board ditto 24 0 0			
Trowſers 2 12 0			
Skippers extra 2 2 0 —	52	14	0
Purchaſe of 300,000 herrings, at 5s.	75	0	0
N. B. The two boats are ſuppoſed to catch, each 100,000, remain therefore for the cargo, 300,000			
Forty tons of ſalt, at 54s.	108	0	0
Packing, ſalting, &c. 4 men at 1s. a day, 48 days	9	12	2
If veſſels are hired to carry them to markets	260	6	0
the price is 5d. a hundred for freight, or 4s. 2d. a 1000, and 104l. 3s. 2d. per cargo for 100 tons	104	3	2
	364	9	2

Inſurance,

	£.		
	364	9	2
Inſurance, 1½ per cent, on 300l. -	4	10	0
Supercargo - - -	20	0	0
	388	19	2
Intereſt on that ſum for 6 months, at 6 per cent.	11	15	0
	400	14	2
At the ports they ſell from 10s. to 35s. per 1000, on an average, at 23s. a 1000, 500,000 at that price - -	575	0	0
Expenſes - - -	400	14	2
Profit, 43½ per cent. - -	174	5	10

And this account extends only ſix months from the firſt expenditure of the money, to the receipt from the cargo. If the veſſel is the merchant's own, then the account will be as follows:

			£.		
Expenſes as above - -				260	6 0
A veſſel of 100 tons, 700l. which, at 6 per cent.	Intereſt of	42 0 0			
A year's pay of the captain, at 4l. a month		48 0 0			
Six men, at 30s. -		99 0 0			
Repairs and outſets, 10s. a ton		50 0 0			
Stores for 7 men, at 15s. a month - -		63 0 0			
Per annum - -		302 0 0			
Which for five months		125 10 0			
Deduct the bounty	100 0 0				
Fees and charges	5 0 0	— 95 0 0		30 10	0
Expenſes - - -				290 16	0

Inſurance

			£.		
			290	16	0
Insurance cargo, 1½ per cent.	4	10 0			
Ditto on ship	10	10 0			
			15	0	0
			305	16	0
Interest on that sum, for 6 months, at 6 per cent.			9	3	0
			314	19	0
Produce			575	0	0
Expenses			314	19	0
Profit			260	1	0

Here appears to be a loss of 28 per cent. by accepting the bounty: but the explanation of this lies in the difficulty of being sure of a vessel on freight, this is not always certain, which induces them to build, though freighting those of other people is so evidently cheaper. Respecting the mode of taking the fish, the boats, as before mentioned, are provided with all the accoutrements necessary; and here it will be proper to mention an improvement of Mr. Montgomery's, by which he has saved greatly: in common the nets are tanned with bark, but he mixes tar and fish oil, 5 parts of tar, and one of oil, melted together, to incorporate thoroughly, and while quite hot, puts the nets into a tub, and pours it upon them, in quantity sufficient to wet them; draws it off by a hole at the bottom of the tub, immediately, in order that too much of it may not stick, and make them clammy, which would be the

the caſe, if it cooled on them; at the bottom of the tub, ſhould be an open falſe bottom, or the nets will ſtop the hole, and the mixture will not run off free enough. By means of this ſimple operation, the nets are prevented from rotting, and the fiſhermen are ſaved the trouble of ever ſpreading and drying them, which in common is done every day, and is a great ſlavery in the ſhort days; the benefit has been found ſo great, that almoſt all the country has come into it, and every net on the coaſt would, this year, have been done, but the ſcarcity of the tar, owing to the American war, prevented it. In working the nets alſo, Mr. Montgomery has made improvements; he has found that corking the line under the ſtrapped buoys is wrong, as it keeps it in an uneven direction; he has a vacancy of corks for three fathom on each ſide the buoy lines, but the middle ſpaces corked thick, which he finds to anſwer exceedingly well. He remarks that the fiſhery ſuffers very much, for want of an admiral being appointed, as in Scotland, to hear and determine differences; there is no order or regularity kept up, but much diſturbance and loſs for want of it. In the ſale of the herrings, the merchant ſuffers greatly, by the competition of the Gottenburg and Scotch fiſhery. At Cork, great quantities of Gottenburg herrings are imported, which, though they pay a duty of 4s. a barrel, yet, as 2s. 4d. ½ is drawn back on the re-exportation, and with an advantage of packing the herrings, of 20 Gottenburg barrels, into 25 Iriſh ones, and conſequently having the drawback on 25, though the duty is only paid on 20, with

with all theſe circumſtances, great quantities of them are ſent to the Weſt Indies, to the prejudice of the Iriſh fiſhery. Another miſchief is, that though there is a bounty of 2s. 4d. a barrel exported, yet ſuch are the fees, and old duty, that the merchant receives only 11d. $\frac{1}{2}$ and that ſo clogged and perplexed with forms and delays, that not many attempt to claim it. The drawback on the foreign herrings is paid immediately on the merchant's oath, but the Iriſh bounty not till the ſhip returns, with I know not how many affidavits and certificates from conſuls and merchants, it may be ſuppoſed perplexing when it is not claimed. The Scotch have a bounty per barrel, on exportation, which they draw on ſending them to Ireland, by which means they are enabled, with the aſſiſtance of a higher bounty on their veſſels, to underſell the Iriſh fiſhery in their own markets, while the Iriſh merchant is precluded from exporting to either Scotland or England; this is a very hard caſe, and certainly may be ſaid to be one of the oppreſſions on the trade of Ireland, which a legiſlature, acting on liberal and enlarged principles, ought to repeal. The trade of ſmoaking herrings, which is conſiderable in England, might be carried on here, to much greater advantage, if there was wood to do it with. In the Iſle of Man they have ſmoak houſes, ſupplied with wood from Wales; it is a ſtrange neglect, that the landlords do not plant ſome of the monſtrous waſtes in this country with quick growing copſe wood, which would, in five or ſix years, enable them to begin the trade. The

plenty

plenty of cod on this coaſt is very great, quite from Hornhead to Mount Charles, in winter, when the herrings ſet in, and may then be taken in any quantities. Some wherries come for cod, ling, glaſſen, &c. all which are plentiful; but on the banks they are to be taken in ſummer, and in the winter they follow the herrings.

In all the bays on the coaſt, in March and April, there are many whales, the bone ſort; they appear on the coaſt in February, and go off to the northward the beginning of May; ſometimes they are in great plenty, and in November to February, there are many ſpermaceti whales; this is what induced Thomas Neſbit, Eſq; of Kilmacredon, to enter into a ſcheme for eſtabliſhing a fiſhery on the coaſt, and in executing it, was the inventor of the gun harpoon. Mr. Neſbit firſt uſed the gun harpoon, for killing whales, in the year 1759; he was induced to try this, from great difficulties he met with among the harpooners, who he had engaged for the fiſhery; in this year he began it, with firing lances at them, after they were ſtruck by the hand, in order to kill them the ſooner. From this he paſſed, in 1761, to firing the harpoon itſelf from the gun. He was then engaged with a company, for the purpoſe of carrying on the fiſhery, with ſeveral perſons in Ireland, England, and the Weſt-Indies. In the year 1758, he went to London, and bought a veſſel of 140 tons, and engaged perſons to come over as harpooners. In 1759, one whale was

was caught by the hand harpoon. In 1760, the Greenland harpooners, Dutch, Engliſh, Scotch, and Danes, were at it, and not one fiſh taken. This year there were ſeveral Greenland ſhips on the coaſt, not one of whom caught a fiſh. In 1761, with the gun harpoon, killed three whales, and got them all; after which he every year killed ſome, except one year, when he killed 42 ſun fiſh in one week, each of which yielded from half a ton, to a ton of oil. Mr. Neſbit has ſince given it up, not from want of ſucceſs in the mode of taking the whales, but from being put, by his partners, for want of knowledge in the buſineſs, to uſeleſs expenſes. From many experiments, he brought the operation to ſuch perfection, that, for ſome years, he never miſſed a whale, nor failed of holding her by the harpoon: he had for ſome time ill ſucceſs, from firing when too near, for the harpoon does not then fly true, but at 14 or 15 yards diſtance, which is what he would chuſe, it flies ſtrait; has killed ſeveral at 25 yards.

When the harpoon is fired into the whale, it ſinks to the bottom with great velocity, but immediately comes up, and lays on the ſurface, laſhing it with tail and fins for half or three quarters of an hour, in which time he fires lances into it, to diſpatch it, and when killed, it ſinks for 48 hours, where he leaves a boat, or a caſk, as a buoy to mark the place, to be ready there when the whale riſes, that they may tow it into harbour, according as the wind lays. To carry on this buſineſs here, he knows from experience, that nothing more would be wanting,

wanting, than a ſhip of 130 tons, with 100 tons of caſk: three boats, with each 8 men, ſix to row, one to ſteer, and one with the gun, with ropes, harpoon, lances, &c. the whole very much inferior to the expenſe of equipping a Greenlandman. I have been the more particular in giving an account of this undertaking, becauſe the ſociety for the encouragement of arts, &c. at London, has long ſince given premiums for the invention of the gun harpoon, ſuppoſing it to be original.

In reſpect to the linen manufacture, it conſiſts in all this country in ſpinning yarn only. Very little cloth woven here, except for the uſe of the people. They raiſe flax enough for their ſpinning in years when ſeed is plentiful and dry ſeaſons, but ſome are ſo wet as almoſt to ſpoil the crop: all the women and children of ten years old and upwards ſpin. They very ſeldom let the ſeed ripen; they have tried it but found it did not anſwer ſo well as foreign ſeed. It is computed that there are two ſpinners in every family, who ſpin about one hank a day, or a ſpangle and a half a week; the medium is 2lb. to the ſpangle, or 4 hanks, which is half a pound of flax each day. A woman will earn, by ſpinning, according to the price of flax and yarn, from 2d. to 6d. but in general 2½d. or 3d. beſides doing little family trifles. Moſt of the yarn goes to Derry.

The ſoil about Mount Charles is various; a great deal of ſtiff blue clay, which is perfectly tenacious

tenacious of water. Much bog, and a great range of high mountains near it, which break the clouds with a weſterly wind, and occaſion much rain. Rents, per acre, are from 5s. to 10s. 6d. arable, ſome up to 1l. 1s. waſtes 2s. 6d. to 3s. 6d. incloſed. Mountains pay ſome rent, but not by the acre. The whole county through does not let for above 2s. 6d. There are very great extents of mountain all the way from Mount Charles to Ards, by Loch Fin, which is 30 Iriſh miles in a right line; it is a range of mountains, but moſt of the valleys are ſlightly cultivated, though corn does very bad in them from the wetneſs of the climate The farms riſe from 5 or 6 acres to 30 cultivated; but mountain farms are more extenſive. The courſes: 1. Potatoes, manured for with dung, or by the coaſt with ſea weed; get good crops, and from the ſea weed rather better than from dung. 2. Barley, if the land is good. 3. Oats. 4. Lay out for graſs; very few ſow graſs ſeeds 2 or 3 years.

1. Potatoes. 2. Oats. 3. Lay out for graſs 2 or 3 years.

Upon dry land they uſe lime, which is ſold at 6d. to 8d. the barrel of 28 gallons, or 3 buſhels and a half, but generally burn it themſelves. There is lime-ſtone at St. John's Point, and other parts towards Killibegs, and beyond it to the weſtward. They burn it with turf, which is plentiful every where. They have grey marle at Donnegal, and find a good effect from

from the uſe of it. Upon the dry mountains they have flocks of ſheep, not large ones; but every poor man keeps ſome, the wool their profit, and ſell them at 2 or 3 years old. In ſtocking a farm they look not farther than having the horſes and cows. Land ſells at 21 or 22 years purchaſe, rack rent; it ſold better from 1762 to 1768, and the rents are fallen. For two years they have been at a ſtand; but the fall has not been felt near the coaſt, the herring fiſhery keeping them up. The farmers here in general pay half a year's rent with fiſh, and half with yarn. Tythes are generally compounded in the groſs. The middle men were common, but not now. The poor people live upon potatoes and herrings 9 months in the year along the coaſt, and upon oat bread and milk the other three. Very little butter, and ſcarce any meat. They all keep cows, moſt of them a pig or two, and a few hens, and all a cat or a dog. No tea. They are in general circumſtances not improved. Rent of a cabbin, with a garden and a cow's graſs, 20 to 30s.

A farm of 20 acres.

1½. Potatoes. 1. Flax. 5. Oats. 1. Barley. 2. Mowing ground. 9½. Feeding. Rent 10l. Six cows, 2 horſes, 6 ſheep, 2 pigs. People increaſe. But little emigration. Religion more than half catholic. Riſe in the price of labour 1d. a day in 20 years; and in proviſions, one third in that time. The following is a return of population, procured by Colonel Burton's orders, on a part of Lord Conyngham's eſtates.

Manor

	No. of heads of families	Wives.	Sons grown up to 14.	Other Children.	Men servants.	Maid servants.	Total.	Protestants.	Papists.
Manor of Mount Charles.									
County of Donnegal 15,000 acres.	601	521	322	1478	127	105	3154	1138	2016
Manor of Magherymore, ditto county.	699						3887	737	3150
Particulars of part of Magherymore.	367	320	244	1047	45	42	2065	302	1763
Manor of Shana Golden county of Limerick, 4,500 acres.	282						1460		

Cars generally ſliding ones, on account of the hills.

Expenſe of building a mud cabbin 3l. of ſtone and ſlate 40l. In different places in Lord Conyngham's eſtate in Boylagh are many lead mines mixed with ſilver, none of them wrought; miners who have examined them ſay there is much ſilver in the ore. The lead is apparent in many breaches of the rocks.

Auguſt 11th, left Mount Charles, and paſſing through Donnegal, took the road to Ballyſhannon; came preſently to ſeveral beautiful landſcapes, ſwelling hills, cultivated with the bay flowing up among them: they want nothing but more wood, and are beautiful without it. Afterwards likewiſe to the left, they riſe in various outlines, and die away inſenſibly

bly into one another. When the road leads to a full view of the bay of Donnegal, theſe ſmiling ſpots, above which the proud mountains rear their heads, are numerous, the hillocks of almoſt regular circular forms; they are very pleaſing, from form, verdure, and the water breaking in their vales.

Before I got to Ballyſhannon, remarked a bleach green, which indicates weaving in the neighbourhood. Viewed the ſalmon-leap at Ballyſhannon, which is let for 400l. a year. The ſcenery of it is very beautiful; it is a fine fall, and the coaſt of the river very bold, conſiſting of perpendicular rocks, with graſs of a beautiful verdure to the very edge: it projects in little promontories, which grow longer as they approach the ſea, and open to give a fine view of the ocean. Before the fall in the middle of the river is a rocky iſland, on which is a curing houſe, inſtead of the turret of a ruined caſtle, for which it ſeems formed. The town prettily ſituated on the riſing ground on each ſide the river.——To Sir James Caldwell's; croſſing the bridge, ſtopped for a view of the river, which is a very fine one, and was delighted to ſee the ſalmon jump, to me an unuſual ſight: the water was perfectly alive with them. Riſing the hill, look back on the town; the ſituation beautiful; the river preſents a noble view. Come to Belleek, a little village, with one of the fineſt waterfalls I remember any where to have ſeen; viewed it from the bridge. The river in a very broad ſheet comes

from behind ſome wood, and breaks over a bed of rocks, not perpendicular but ſhelving, in various directions, and foams away under the arches; after which it grows more ſilent, and gives a beautiful bend under a rock, crowned by a fine bank of wood. Reached Caſtle Caldwell at night, where Sir James Caldwell received me with a politeneſs and cordiality that will make me long remember it with pleaſure.

Auguſt 12th. The following account of the huſbandry around Caſtle Caldwell, Sir James favoured me with. The ſoil in the vale to Belleek is a yellow clay, 1 to 2 ſpit deep on a limeſtone rock; the whole interſperſed with bog and moraſs. Large tracts uncultivated. Rents vary from 15s. to 20s. an acre cultivated, but mountain and mountain ſides are not meaſured; wherever the plough goes, will yield 7s. at the loweſt. In the mountains they pay but 3s. for the ſummer food of a cow; and for a horſe 4s. 6d. The county of Fermanagh may be divided into 6 parts; one-ſixth the lake at no rent. Mountains and bogs two-ſixths, the reſt of the county at 12s.

The courſe of crops is; 1. Potatoes. 2. Potatoes. 3. Barley or flax. 4. Oats. 5. Oats. 6. Oats. 7. Lay out for graſs. Wherever there are ſpots of meadow, they are mown. Great numbers of farms are taken in partnerſhip in *Rundale*; indeed the general courſe is ſo, upon a farm of 100 acres, there will be 4, 5, or 6 families: but families will take ſuch ſmall ſpots as 5 or 6 acres. Farms in general riſe from 5 acres

acres to 3 or 400; but all the large ones are ſtock farms; in general none ſo high as twenty: all in *Rundale*, partnerſhip or ſtock. Many of the latter part mountain, part arable, and theſe are the only farms of ſubſtance in the country. One of 80l. a year will require 4 or 500l. to ſtock it. Theſe farmers buy year olds—for inſtance, 20; he buys in 20 year olds every year, and every year ſells 20 four year olds: he gives 30s. each, and ſells at 5l. 10s. or 6l. and this he reckons a reaſonable profit. Alſo 3 and 2 year old heifers that have miſſed the bull, keep them through the winter, and ſell them in May, and get 18s. to 20s. for wintering them on coarſe graſs without any fodder. In ſummer they feed them all on mountains. Thoſe who buy the miſt heifers are farmers in Monaghan and Cavan, on coarſe farms, who turn them on the mountains, give them the bull, and ſell them out in the ſpring to the weaving farmers in the linen country, who change their ſtock.

The meaſures here are by pecks and barrels; the weight of the peck of potatoes in Ballyſhannon is 5 ſtone, 4lb. and 10 pecks, make a barrel: in the country they give 6 ſtones. The acre the plantation meaſure. Of potatoes, which they ſet all in the trenching way, they plant 4 barrels an acre, and get on an average 7 or 8 for one, that is, 32 barrels an acre. The price is 8s. a barrel on a medium, or 12l. 16s. an acre; but it is obvious that this peck is a meaſure of their own. They manure generally for them with dung; but often with lime and bog mud mixed, and burnt clay, which they find does

very well. In the county of Tyrone, towards Armagh and Dungannon, they will bring limeſtone 14 or 15 miles, burn it, and ſprinkle their potatoe land with it to prevent the black rot. Rent of Tyrone on an average 7s.

Of barley they ſow 20 ſtone; the barrel of barley is 25 ſtone, and of malt 20. An acre on an average will yield 10 barrels at 16 ſtone. Of oats they ſow a barrel, at 20 ſtone, and get 8 for one. Of bere they ſow the ſame, and get 9 barrels; barley ſells better than bere generally; for flax they plough once on potatoe land. The expenſe of an acre they reckon,

	£.	s.	d.
Rent	0	15	0
County ceſs	0	0	3
Tythe modus	0	0	8
Seed, 40 gallons, at 1s. 6d.	3	0	0
One ploughing	0	5	5
Clodding and ſtones 4 women	0	1	4
Weeding 6 women	0	2	0
Pulling 12 women a day	0	4	0
Watering 3 men and 1 horſe	0	2	6
Graſſing 6 women	0	2	0
Lifting and carrying, 2 women and 2 men, and 1 horſe	0	2	6
Drying, 2 women and 12 load turf	0	1	8
Beetling, 24 women	0	16	0
Scutching 1d. a lb.			
	£. 5	13	4

Price of lime at the kiln 6d. a barrel. Sir James Caldwell has his ſtone quarried, carried, broke and burnt, and drawn 100 yards, for 4d. a barrel labour; ſix ſcore horſe loads of turf coſt 4s. cutting and ſawing, and leading by water, coſts

coſts 5s. more, which 6 ſcore loads will burn at the rate of a load and a half a barrel. They plough all with horſes, 2 or 3 horſes abreaſt.

Land ſells, at rack rent, at 20 to 24 years purchaſe: has not fallen. Rents are fallen in 5 or 6 years 2s. an acre. There is a great deal of letting lands in the groſs to middle men, who re-let it to others; theſe middle men are called *terny begs*, or *little landlords*, which prevail very much at preſent. Theſe men make a great profit by this practice. The people in all the neighbourhood increaſe very faſt. They are all in general much more induſtrious, and in better circumſtances than they were ſome years ago. Their food, for three-fourths of the year, chiefly potatoes and milk, and the other quarter oatmeal: in the winter they have herrings. They have all a bellyful of food whatever it is, as they told me themſelves; and their children eat potatoes all day long, even thoſe of a year old will be roaſting them. All keep cows, and ſome cocks and hens, but no turkeys or geeſe. Six people, a man, his wife and 4 children, will eat 18 ſtone of potatoes a week, or 252lb. but 40lb. of oatmeal will ſerve them. Rent of a cabbin, garden, and one acre, 20s. a cow's graſs 30s. a cow requires one acre and a half for ſummer; and they buy a little hay for winter, and give the cow ſmall potatoes and cabbage-leaves, &c.

The common people are remarkably given to thieving, particularly graſs, timber, and turf, and they bring up their children to *hoking* potatoes, that is, artfully raiſing them, taking out the

the beſt roots, and then replanting them, ſo that the owner is perfectly deceived when he takes up the crop. A poor man's turf from 15s. to 20s. Living is exceedingly cheap here, beſides the common proviſions, which I have every where regiſtered, wild ducks are only 3d. and powder and ſhot: Plover, 1½d. and ditto: woodcocks, 1d. and ditto: Snipes, 1½d. and ditto; teal, 2d. and ditto, and widgeon the ſame; ſalmon, 1½d. a lb. trout, perch, pike, and bream, ſo plentiful as to have no price. Sir James Caldwell has taken 17 cwt. of fiſh, bream and pike, in one day: cod, 3s. a dozen: whiting, from 8d. to 1s. a dozen: herrings, from 3d. to 9d. per 100. lobſters, from 3s. 6d. to 4s. a dozen: oyſters, 6d. to 20d. a 100. eels, 2s. a dozen: crabs, 1s. to 2s. a dozen: wages, 6l. dairy-maids, and others, 4l. There is very little weaving in this country, except what is for their own uſe, but ſpinning is univerſal in all the cabbins. They receive for ſpinning ſpangle yarn, or four hanks, 1s. 2d. a ſpangle, and they will ſpin it in four days. Country ſervants are hired at 3l. a year, who engage to do the work of the houſe, and ſpin a hank, that is a dozen a day, there are 12 cuts to the dozen.

In the mountain tracts, the rents are paid by yarn, young cattle, and a little butter. They ſpin a good deal of wool, which they make into druggets, the warp of tow-yarn, and the weft of wool. The following particulars of 34 of Sir James's labourers will ſhew the ſtate of the poor in this neighbourhood, reſpecting their ſtock, potatoe land, and quantity of flax ſeed ſown:

No.

No.	Rent.	Cows.	Souls.	Po.	Flax	Galls.
1	3 17 6	7	4	¼		6
2	6 0 0	6	6	¼		6
3	3 7 6	7	6	¼		6
4	2 0 0	3	5	¼		3½
5	2 8 9	2	7	¼		5
6	3 0 0	5	7	¼		7
7	1 10 0	0	6	¼		7
8	2 5 0	2	8	⅛		3
9	4 0 0	3	10	¼		6
10	4 0 0	4	6	⅓		0
11	1 8 0	4	6	⅓		6
12	3 15 0	6	5	¼		3
13	1 8 0	4	5	¼		6
14	1 8 0	4	6	⅓		6
15	2 10 0	5	9	⅓		6
16	2 16 8	6	9	½		7
17	2 0 0	1	6	½	R	4
18	3 8 3	2	8	⅓		4
19	3 15 6	3	9	¾		7
20	5 16 3	4	6	½		4
21	1 5 0	3	4	¼		5
22	2 2 0	3	3	¼		4
23	3 15 0	2	4	¼		8
24	1 17 0	3	4	¼		3
25	1 8 6	2	3	¼		5
26	1 1 0	2	6	¼		1½
27	3 10 0	3	7	½		10
28	3 0 0	3	7	⅓		0
29	1 8 0	3	2	¼		3
30	1 10 0	3	6	⅓		1
31	1 11 0	3	4	¼		0
32	3 0 0	4	8	¼		7
33	3 0 0	5	4	½		7
34	5 2 6	4	5	½		4
Totals		121	204 =			
Average		3½	= 6 =			

Nothing can be more beautiful than the approach to Caſtle Caldwell; the promontories of thick wood, which ſhoot into Loch Earne, under the ſhade of a great ridge of mountains, have the fineſt effect imaginable: as ſoon as you are through

through the gates, turn to the left, about 200 yards to the edge of the hill, where the whole domain lies beneath the point of view. It is a promontory, three miles long, projecting into the lake, a beautiful aſſemblage of wood and lawn, one end a thick ſhade, the other graſs, ſcattered with trees, and finiſhing with wood. A bay of the lake breaks into the eaſtern end, where it is perfectly wooded: there are ſix or ſeven iſlands among them, (that of *Bow* three miles long, and one and a half broad) yet they leave a noble ſweep of water, bounded by the great range of the Turaw mountains. To the right, the lake takes the appearance of a fine river, with two large iſlands in it, the whole unites to form one of the moſt glorious ſcenes I ever beheld. Rode to the little hill above Michael Macguire's cabbin; here the two great promontories of wood join in one, but open in the middle, and give a view of the lake, quite ſurrounded with wood, as if a diſtinct water; beyond are the iſlands, ſcattered over its face, nor can any thing be more picturesque than the bright ſilver ſurface of the water breaking through the dark ſhades of wood. Around the point on which we ſtood, the ground is rough and rocky, wild, and various, forming no bad contraſt to the brilliant ſcenery in view. Croſſing ſome of this undreſſed ground, we came to a point of a hill, above Paddy Macguire's cabbin; here the lake preſents great ſheets of water, breaking beyond the woody promontories and iſlands, in the moſt beautiful manner. At the bottom of the declivity, at your feet is a creek, and beyond it the lands of the domain,

main, ſcattered with noble woods, that riſe immediately from the water's edge; the houſe, almoſt obſcured among the trees, ſeems a fit retreat from every care and anxiety of the world: a little beyond it the lawn, which is in front, ſhews its lively green among the deeper ſhades, and over the neck of land, which joins it to the promontory of wood, called *Roſs a goul*, the lake ſeems to form a beautiful wood-lock'd baſon, ſtretching its ſilver ſurface behind the ſtems of the ſingle trees; beyond the whole, the mountainy rocks of Turaw, give a magnificent finiſhing. Near you, on every ſide, is wild toſſed-about ground, which adds very much to the variety of the ſcene. From hence we paſſed to the hill in the mountain park, from whence the ſcenery is different; here you ſee a ſhort promontory of wood, which projects into a bay, formed by two others, conſiderably more extenſive, that is *Roſs a goul* and *Roſsmoor eaſt*. The lake ſketching away in vaſt reaches, and between numerous iſlands, almoſt as far as the eye can command. In the great creek, to the right, which flows up under the mountain of Turaw, are two beautiful iſlands, which, with the promontories, ſcattered with trees, give it the moſt agreeable variety.

In another ride, Sir James gave me a view of that part of his domain which forms the promontory of Roſs moor; coaſted it, and croſſed the hills: nothing can exhibit ſcenes of greater variety or more beauty. The iſlands on every ſide are of a different character; ſome are knots

knots or tufts of wood, others ſhrubby. Here are ſingle rocks, and there fine hills of lawn, which riſe boldly from the water; the promontories form equal diſtinctions; ſome are of thick woods, which yield the darkeſt ſhade, others open groves, but every where the coaſt is high, and yields pleaſing landſcapes. From the eaſt point of Roſs moor, the ſcenery is truly delicious. The point of view is a high promontory of wood, lawn, &c. which projects ſo far into the lake as to give a double view of it of great extent. You look down a declivity on the lake which flows at your feet, and full in front is the wood of *Roſs a goul*, at the extreme point of which is the temple: this wood is perfectly a deep ſhade, and has an admirable effect. At the other end it joins another woody promontory, in which the lawn opens beautifully among the ſcattered trees, and juſt admits a partial view of the houſe half obſcured; carrying your eye a little more to the left, you ſee three other necks of wood, which ſtretch into the lake, generally giving a deep ſhade, but here and there admitting the water behind the ſtems and through the branches of the trees; all this bounded by cultivated hills, and thoſe backed by diſtant mountains. Here are no objects which you do not command diſtinctly: none that do not add to the beauty of the ſcene, and the whole forming a landſcape rich in the aſſemblage of a variety of beauties. The other reach of the lake varying under Roſs moor is a different ſcene, bounded by the mountains and

and rocks of Turaw: to the right theſe reaches join the lake, which opens a fine expanſe of water ſpotted with iſlands. It is upon the whole a ſcene ſtrikingly agreeable. Little of the ſublime, but the very range of beauty, gaiety, and pleaſure, are the characters of the ſpot; nature makes no efforts here but thoſe to pleaſe; the parts are of extreme varieties, yet in perfect uniſon with each other. Even the rocks of Turaw have a mildneſs in their aſpect, and do not break the general effect by abrupt or rugged projections. It was with regret I turned my back on this charming ſcene, the moſt beautiful at Caſtle Caldwell, and the moſt pleaſing I have any where ſeen. Rode round *Roſs a goul*, the promontory in front of the houſe, from which the views are exceedingly beautiful, commanding a noble hanging wood on the banks of Roſs moor, and the woody necks that ſtretch from the land beyond the houſe, with ſeveral iſlands, which give the greateſt variety to the ſcene. On the point, Sir James has built an Octagon temple, which takes in ſeveral views that are exceedingly pleaſing; this neck of land is a wood of 40 acres, and a more agreeable circumſtance ſo near a manſion can ſcarcely be imagined.

Take my leave of Caſtle Caldwell, and with colours flying, and his band of muſic playing, go on board his ſix-oared barge for Enniſkillen; the heavens were favourable, and a clear ſky and bright ſun, gave me the beauties of the lake in all their ſplendor. Paſs the ſcenes I have

have deſcribed, which from the boat take a freſh variety, and in all pleaſing.

Eagle iſland firſt ſalutes us, a woody knole. Others paſs in review; among the reſt Herring iſland, noted for the wreck of a herring-boat, and the drowning of a fidler; but the boatmen love herrings better than muſic, and gave their name to the iſle, rather than that of the ſon of Apollo. Inniſnakill is all wood. Rabbit iſland is 40 acres of paſture, which riſes bold from the water. Inniſmac Saint alſo 40 acres of graſs. Then comes a cluſter of woody iſlands, which riſe in perfect hills from the waters edge, the wood dipping in the lake, and they are ſo numerous that the lake is cut by them into winding ſtraits, more beautiful than can be thought. The reader may imagine how exquiſite the view muſt be, of numerous hills of dark and complete wood, which riſe boldly from ſo noble a ſheet of water: they form a moſt ſingular ſcene. Wherever the ſhore is ſeen, it is riſing lands; in ſome places woods, in others cultivated hills. Paſſing theſe ſylvan glories, we come next to the Gully iſland, all of wood, and is 100 acres: much of it is bold riſing land, and the oak dips in the water. What a ſpot to build on, and form a retreat from the buſineſs and anxiety of the world! Nature here is blooming. It is in the midſt of a region where one would think ſhe has almoſt exhauſted herſelf in producing ſcenes of rural elegance. It belongs to Lord Ely; I envy him the poſſeſſion. The only thing it yields its owner

owner is a periodical profit from cutting its beautiful woods. Shelter, proſpect, wood and water, are here in perfection; what more can be wiſhed for in a retreat, if an unambitious mind gilds the ſcene with what neither wood nor water can give—content? The ſacrilegious axe has deſolated three parts in four of its noble covering; and it will be 15 years before the rough ground and naked ſtubs are again cloathed.

Paſs the hanging grounds of Caſtle Hume; ſome of them very beautifully crowned with wood, and the oppoſite coaſt of the lake, wood and cultivation. Car and Ferny iſlands bold lands cut into fields of corn give a freſh variety, and the woods of Caſtle Hume ſurround a bay to the right, at the bottom of which is the Caſtle half hidden with trees. It opens, however, to the view ſoon after, and accompanied on each ſide by a fine wood, and the ſurrounding ground various. The lake then takes the form of a bay, between ſome pretty cultivated ſlopes on one ſide, and Deveniſh iſland on the other, with its tower full in view. Advancing, the coaſt on the right conſiſts of beautiful cultivated hills, divided into incloſures by hedges, and the waving hills riſing one beyond another in a various and pleaſing manner; the oppoſite ſhore is the ſame, but the view more diſtant. The iſland of Deveniſh is part of it very rich land; the poor people pay 5l. an acre for the old graſs for one crop of potatoes. About Ballyſhannon, it is 3l. or 4l. per acre.

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The barley on the iſland after the potatoes is exceedingly fine. When you come abreaſt of the round tower, look backwards, to the right the ſcenery is very beautiful, the wood at the extremity, the waving hills under graſs and corn, which ſpread over this whole coaſt, form alſo the ſcenery in front, and unite with the lake to make a moſt pleaſing landſcape. Landed at Enniſkillen, and that evening reached Caſtle Cool, the ſeat of A. Lowry Corry, Eſq; who was abſent in the county of Tyrone, but Mrs. Corry was ſo obliging as to procure me the information I wiſhed.

Auguſt 15th, rode to the Topped Mountain, from whence is an immenſe proſpect of many counties, and commanding Loch Earne from one end to the other, being above 40 miles long; the great ſheet is towards Caſtle Caldwell, that to Belturbet is ſo thickly ſtrewed with iſlands, that the water has more the appearance of ſeveral woods. Around Enniſkillen, &c. land lets on an average at 10s. to 12s. an acre that is cultivated, but there is ſome mountain and bog that lets for little or nothing. Farms are various, many ſmall ones of a few acres, but the moſt common ſize is 40 to 70 acres, with ſome large ſtock ones of 2 or 300l. a year: the ſoil is principally a wet tenacious clay. The ſyſtem of theſe ſtock farms is, to keep cattle of various ages, from year-olds to fat ones of 5 years, according to the quality of the land: they keep but few ſheep. Weaving is but juſt coming in, but increaſes much; the

the ſpinning is common all over the county in every cabbin, by the women and girls: they do not quite raiſe flax enough to ſupply their own demand.

The courſe of crops moſt general is, 1. Potatoes. 2. Barley. 3. Oats. 4. Flax. 5. Laid out for graſs. Farms very much taken in the rundale way by partnerſhip.

The people increaſe very faſt in this neighbourhood, and are in better circumſtances than they were ſome years ago. Some live on potatoes and milk, for all keep cows, and they eat ſome fleſh meat. The number of little farmers who are ſupported by their farms alone is conſiderable, from whence it is plain that linen has not taken deep root. There are two bleach greens within 7 miles, and all they bleach is made in the country. A woman will earn 4d. a day by ſpinning, and do ſomething in the family beſides. The manure principally uſed is lime, which on an average coſts them about 8d. a barrel, and they lay 80 and upwards per acre.

Auguſt 15th, to Belleiſle, the charming ſeat of the Earl of Roſs. It is an iſland in Loch Earne of 200 Iriſh acres, every part of it hill, dale, and gentle declivities: it has a great deal of wood, much of which is old, and forms both deep ſhades, and open chearful groves. The trees hang on the ſlopes, and conſequently ſhew themſelves to the beſt advantage. All this

this is exceedingly pretty, but it is rendered trebly ſo by the ſituation: a reach of the lake paſſes before the houſe, which is ſituated near the banks among ſome fine woods, which give both beauty and ſhelter. This ſheet of water, which is three miles over, is bounded in front by an iſland of thick wood; and by a bold circular hill, which is his Lordſhip's deer park, this hill is backed by a conſiderable mountain. To the right are four or five fine clumps of dark wood; ſo many iſlands which riſe boldly from the lake, the water breaks in ſtraits between them, and forms a ſcene extremely pictureſque. On the other ſide the lake ſtretches behind wood, in a ſtreight which forms Belleiſle. Lord Roſs has made walks round the iſland, from which there is a conſiderable variety of proſpect. A temple is built on a gentle hill, commanding the view of the wooded iſlands above-mentioned; but the moſt pleaſing proſpect of them is coming out of the grotto: they appear in an uncommon beauty; two ſeem to join, and the water which flows between takes the appearance of a fine bay, projecting deep into a dark wood: nothing can be more beautiful. The park hill riſes above them, and the whole is backed with mountains. The home ſcene at your feet alſo is pretty; a lawn ſcattered with trees that forms the margin of the lake, cloſing gradually in a thick wood of tall trees, above the tops of which is a diſtant view of Cultiegh mountain, which is there ſeen in its proudeſt ſolemnity. To Lord Roſs's very obliging attention I am indebted for the following

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ing particulars:—Rents about Belleiſle are upon an average 10s an acre for graſs and arable, but mountain ſides are ſet by the lump, according to the number of cattle they feed. The ſoil is all of blue clay. Farms are generally 50l. or 60l. a year; where there are weavers they are very ſmall, but the number does not exceed a twentieth of the whole. They, however, increaſe faſt; they have doubled their number in 10 years. Seventeen years ago, there not being one bleach mill, Lord Roſs erected one; after which more were built, but in the whole county not more than ten. Average rent of cultivated land in Fermanagh, 10s. Courſe, 1. Potatoes, 2. Barley, 3. Oats, 4. Oats, 5. Oats. 6. Laid out ſix or ſeven years. 1. Potatoes, 2. Barley, 3. Oats, 4. Flax, 5. Laid out, ſome ſow graſs ſeeds.

Potatoes yield 20 barrels an acre; each 4 buſhels; they plant two and an half to an acre; the price from 2s. 6d. to 20s. generally 10s. on ſtiff land, two crops of potatoes, but not on light. Barley yields from 10 to 15 barrels; oats from 6 to 10 barrels, but ſometimes not 5. Account of flax:

Rent and tillage - - -	3	0	0
Seed, two buſhels, at 12s. - -	1	4	0
Clodding, 3 boys, at 6d. - - -	0	1	6
Pulling, 8 women, at ditto - -	0	4	0
Watering, two men and two horſes, the men, 6d. the horſes, 1s. - -	0	3	0
Taking out and ſpreading, two men and ſix women - - -	0	4	0

Lifting, three women, one horſe, and one man 0 3 0
Drying, two men and two women, 2s. and ſix kiſhes of turf, 6s. - - - £. 0 8 0
Beetling at the mill, by the ſtone.

The linen wove here, is from 6 to 18,000, but in general 1200. A woman ſpins one hank, for which ſhe has three half pence and board, if no board, four pence; the length of the webs vary, ſome ten yards, but in general double ones of fifty yards; it takes two hanks of yarn to every yard of the web; the weavers have five pence a yard for weaving it, and they will do three yards a day; they ſell it at monthly markets. They breed up their ſons more and more to weaving, as it increaſes much, and theſe people pay their rents by it, but they ſend off much more yarn than they weave.

The food of the poor is potatoes, butter-milk, and oat-bread. They all keep cows and pigs. Moſt of the country is under grazing, ſome of which farms riſe to 500l. a year. They generally buy in year-old calves, for which they give, on an average, 1l. 1s. to 1l. 5s. and keep them till they are four years old, and ſell them lean to the graziers of other countries, who have land that will fatten: ſell them 5l. to 6l. a bullock, thus, every year, they buy in, and ſell out a ſtock. Upon a farm in the neighbourhood, of 350l. a year, beſides horſes, cows, and ſheep, the farmer ſells one hundred bullocks every year. Many cows are fattened, bought in in May at 2l. 10s. to 5l. and ſold out in November,

vember, at 1l. 11s. 6d. profit, and a good acre will carry one of them, but in general it will take more. No dairies. Some ſheep are kept, the lambs ſold, at three and four months old, at 5s. to 10s. 6d. each, 7s or 8s. in general; the wool of the ewe, 4s. 4d. Some buy two or three year old wethers, for fattening, in June, at 15s. and ſell them fat in March or April following, at 1l. 1s. to 1l. 6s. Breeding ewes reckoned the moſt profitable, unleſs the land is very good. In moory land, they uſe lime for manuring, at 7d. a barrel, but if the farmer burns it himſelf, and has the ſtone convenient, it is done for 3d. with turf. A good deal of hollow draining, filled with ſtones, ſome with ſods, but done only by gentlemen. Much corn, &c. by poor people, put in with ſpades, which they call *loys*, becauſe they have no horſes, and one acre of oats dug, is worth one and a half ploughed; ſome do it on this account, though they have horſes.

Lord Roſs has generally a ſmall field of turnips and cabbages for feeding ſheep in the winter; finds that cabbages are much the beſt, and laſts the longeſt.

Auguſt 17th, rowed to Knockinny, the deer-park, three miles acroſs the lake, through a maze of woody iſlands. Land on Lady Roſs's of 40 acres, in which ſhe has cut walks leading through a great variety of ground; in ſome places through open groves of large trees, in others cloſe dark wood; through lawns and rough

ground, from ſome of which there are various views of the lake, and from others it is ſo perfectly excluded, that one would not think water was ſo near, a cabbin for a poultryman, a covered bench, and a ſpot marked out for a cottage. As the boat approached Knockinny, a pretty bay opened upon us, round which, on one ſide, is a projecting point of wood, and on the other, the hill of Knockinny, with the wood riſing up its ſide, uniting with that of the point to form one maſs. From the hill the view is very fine; you look down on 11 or 12 wooded iſlands ſcattered over the lake, with others cultivated, and the country riſing around it. Belleiſle appears to ſtand in the midſt of a very large wood. The fiſh, in this part of the lake, are perch, pike to 40lb. trout, eels, bream, &c. It is extraordinary that perch ſhould appear in all the lakes of Ireland and in the Shannon at the ſame time, which was about 17 years ago. Large flights of ſwans ſometimes appear here in winter, and are ſure ſigns of a ſevere one.

Reached Florence Court, Lord Enniſkillen's ſeat, ſituated on an eminence under a great ridge of mountains. That nobleman procured me with the politeſt attention the following particulars.

The ſoil in general is a thin ſurface, 4 to 8 inches of ſtoney mould, under that a tough yellow clay of 14 to 18 inches, and under that a purple lime ſtone gravelly clay, a good manure for tillage, but bad for graſs. Lets on an aver-

age

age at 10s. an acre the new leaſes; but if there is bog or mountain, it is thrown in at that rent. Mountain ſides of dry lime-ſtone ſoil will let at 6s. heathy ones thrown in. About Enniſkillen, Lord Enniſkillen has a conſiderable property, and heathy mountain within two miles of the town, lets at 9s. The town parks, from 40s. to 3l. 3s. The cultivated land, not town parks, from 12s. to 20s. In reſpect to the advance of rents, it will beſt appear by inſerting the particulars of ſome of Lord Enniſkillen's farms, at old and new rents, in various ſoils and ſituations at Florence Court, Enniſkillen, near Swadling-bar, and Ballyſhannon.

Farms.	Years let.	Acres.	O. Rent.	N. Rent.
No. 1	1731	286	£. 20	£. 150
2	1750	37	6	18
3	1746	283	27	100
4	1740	90	10	37
5	1730	73	5	31
6	1747	150	18	61
7	1737	60	10	42
8	1731	66	8	40
9	1730	86	9	28
10	1731	46	6	20
11	1731	41	6	20
12 A Mountain Farm.	1736	99	9	20
13	1757	191	14	18
14	1747	43	6	18
15	1731	66	12	30
16 Mountain.	1734	107	12	31
17 Ditto.	1750	406	18	25
18 Ditto.	1745	316	34	150
19	1731	118	23	93
20	1752	63	22	36
21	1752	15	5	9
22	1738	223	15	82
23	1759	97	18	87
24	1732	27	6	32
25	1731	53	14	52
26	1731	80	14	60
27	1731	90	14	67
28	1731	97	15	90
29 Mountain.	1734	402	11	100
30	1732	224	27	61
31	1731	66	18	60
32	1731	75	14	56
33	1732	128	22	64
34	1732	314	27	100
35	1731	209	27	94
36	1731	57	10	50
37	1746	132	15	76
38	1744	314	28	82
39	1758	166	16	56
40	1735	91	15	68
41	1734	407	37	164
42	1732	33	9	30
43	1731	61	17	31
44	1731	116	5	48
45	1744	1070	102	350
46 Mountain.	1752	145	18	62
47	1734	190	23	95
48	1742	93	8	45
49	1742	93	8	45
50 Mountain.	1748	235	10	165
51	1733	454	25	70
52	1733	149	20	70
53	1749	126	34	87
54 Mountain.	1751	2371	65	340
		11,000	981	3807

The

The extremes of date may be called from 1730 to 1770, or 40 years, the average of the period would be 20 years; but we may ſafely ſay that in 30 years the rent is quadrupled. The courſes of crops;

1. Potatoes. 2. Potatoes, reverſing the lands. 3. Oats. 4. Oats. 5. Oats. 6. Lay out for weeds, &c.

1. Potatoes. 2. Potatoes. 3. Oats. 4. Oats. 5. Flax. 6. Oats. 7. Lay it down.

1. Potatoes. 2. Potatoes. 3. Barley. 4. Oats. 5. Oats. 6. Lay it out.

Tillage farms riſe from nine acres ſubdivided, to large tracts in grazing ones. The manures are marle, lime-ſtone, gravel, lime, bog, and ſod aſhes; the marle is white and light, found under bogs, and in banks; that in the banks, about Florence Court, is upon clay, or gravel, with ſprings under it, which makes the marle run into forms like cinders, petrified, and of a reddiſh caſt, as if from vitriolic acid. The whole country abounds with ſulphurcous, and other mineral ſprings. Very little of this marle uſed; they uſe the lime ſtone gravelly clay moſt, which gives them very good crops. The expenſe of lime, carriage included, is 8d. a barrel, ſlacked; they lay ſixty barrels an acre. They burn their mountain land, lime, and marle it, and ſet potatoes. In the year 1774, there were claimants for the Dublin Society's premiums, for 174 acres of

of bog reclaimed, and 120 of mountain. In 1773, 38 moor, and 120 bog. No draining done by the farmers, but much by the gentlemen.

Potatoes they plant all on lays; plant four barrels per acre, each barrel 6 cwt. they are meaſured by the peck, ſo piled up as to weigh 3 ſtone each: the price from 5s. to 16s. the barrel; average, 8s. No hiring of land merely for planting potatoes, but the farmers will let the cottars take a crop of potatoes, if they dung the land. The produce, on an average, will be 32 barrels: thirty-two men will ſet an acre a day, with five children: when the potatoes appear, they ſhovel the furrows, which four men will do in a day: eight men will weed an acre in a day, and ſixty-four men will take them up.

EXPENSES.

Rent				0	10 0
County ceſs				0	0 4
Four barrels of ſeed				1	12 0
Planting, 32 men, at 8d. ditto, five children, at 5d.				1	3 5
Shoveling, four men, 8d.				0	2 8
Weeding, eight men, 8d.				0	5 4
Taking up, ſixty-four men, 8d.				2	2 8
Sorting, and picking, ſixteen men, at 8d.				0	10 8
Drawing home, ſeven horſes				0	7 0
Manuring, 200 loads, at 1d.			0 16 8		
Drawing, four cars, 4 men, and 4 boys,			0 6 8	1	3 4
				7	17 5

PRODUCE.

PRODUCE.

Thirty-two barrels, at 8s.		12	16 0
Expenſes - -		7	17 5
	£.	4	18 7

Of oats, they ſow two barrels an acre, and ſome more, and the crop twelve barrels. Of barley, they ſow five buſhels an acre, each eight gallons, the crop eight barrels. Much ſtubble and potatoe land, in wet ſoils, is dung for corn, and it takes eighteen men to dig an acre a day. Much flax is ſown, both on the land, by its owner, and hired by cottars, who have no land fit for it; they hire a peck ſowing, at 2 buſhels and an half, or 2l. 14s. 2d. but the land is ploughed and harrowed into the bargain.

Rent and ceſs - -	£.	0	10 4
Seed, five buſhels, at 12s. -		3	0 0
Clods and ſtones, eight men, 8d. -		0	5 4
No weeding			
Pulling, 16 women, at 6d. -		0	8 0
Gathering, tying, and rippling, ſixteen men, at 8d. - - -		0	10 8
Watering, eight horſes and cars, and eight men, the horſe and car, at 1s. -		0	13 4
Taking out, four men - -		0	2 8
Spreading, eight women -		0	4 0
Lifting and carrying home, 4 cars, 8 women and 4 boys - -		0	8 0
Drying and beetling by a turf fire, four men and thirty-two women - -		0	18 8
		7	1 0

Scutch-

		7	1 0
Scutching, moſtly at home, by women, but done for three halfpence per lb. 360 lb. the acre - - - -		2	5 0
Heckling, thirteen pence a ſtone, twenty-two ſtone - - -		1	3 10
		10	9 10
Produce: 360 lb. or 22 ſtone, clean dreſſed, at 17s. 6d. - -		19	5 0
Expenſes - -		10	9 10
		8	15 2

They ſpin all the flax they raiſe into three to five-hank yarn, on an average four. Many ſervants are hired for ſpinning, at 12s. a quarter, who do the buſineſs of the houſe, and ſpin a hank a day; if they do it for pay, it is 3d. a hank. A ſtone ſpins into 64 hanks; and when they have done it, it is ſold at the markets and fairs: the tow they ſpin into two-hank yarn, which is wove into ſeven-hundred cloth, for home conſumption. The weavers earn, on an average, 10d. a day. Many cows are kept, and much butter made by every little farmer, which they put into tubs of $1\frac{1}{4}$ cwt. and if one has not cows enough to make it, they join, in order to do it. Two cows will rear two calves, feed the family, and make a tub, which ſells for 40s. per cwt. on an average, or 2l. 10s. the two cows; a cow requires two acres for her ſummer food, or if they have it, more, and her winter's hay, 10s. A good cow, if no milk is taken from her, will

will make 7lb. of butter a week; a middling one, four pounds and a half, and ſhe will give twelve quarts a day. Many pigs kept, but no proportion obſerved to the number of cows, which are kept in the houſe at night in winter, but out all day. The calves ſuck the cows three months before weaning; many do not ſuck at all, but are weaned in a few days. The management of the grazing farmers, is to buy in year olds, at 20s. on an average, keep them till they are four years old, and ſell them from 4l. to 10l. Some of theſe farmers occupy very large farms, even to 1000l. or 1500l. a year, but theſe are rare. Some buy in at three years old, and ſell out at four; ſome at four, and ſell at five; ſome at yearlings, and ſell out at three, according to their lands. The common farmers buy in *miſt* heifers, in November, and ſell them in May, when they buy dry cows, which they ſell fat in November, and make on the fattening, 30s. a head, and on the miſt heifers, 16s. on an average. The little farmers that have lands fit for ſheep, keep a few for cloathing their families, very many of them ſpinning wool enough, and weaving it for their own cloaths, pettycoats, blankets, &c. alſo ſtuffs for the women. The girls are ſeen in ſummer in their ſtriped linens and whites of their own making, and in winter in their woollen ſtuffs. They clip from a ewe, about 3lb. on average.

Goats were ſo common that every perſon had them from the eaſe of keeping, as they brouze only on buſhes, and 20 were not reckoned a *ſum*. This term ſhould be explained,

it

it implies a portion of land ſufficient for a given ſtock; for inſtance, keeping a cow is a ſum; a horſe a ſum and an half; 8 ſheep; 6 ewes and 6 lambs; 3 year olds; a 2 year old, and a year old; a 3 year old; 20 geeſe; a barrel of potatoes ſetting; a peck of flax ſowing; a barrel of corn ſowing, and a cow's graſs; all theſe are ſums. They plough all with horſes, except gentlemen, 3 abreaſt, and do half an acre a day. Drawing by the tail not done theſe 7 years. The price per acre 10s. Of digging by the acre 12s. and the crop 10s. an acre more; but they reckon that nothing in the world *wears out* the land more than digging. They lay their wet lands in narrow ridges of 5 furrows. The horſes get no oats, yet they are not more than from 6s. to 12s. a ſack, of 2 barrels meaſure; the barrel weighs 9 or 10 ſtone. Average price 9s. In hiring a little farm, no attention given to what ſtock they have. Land ſells at 21 years purchaſe, rack rent, which is lower than 4 or 5 years ago. Rents are fallen in 4 years 2s. an acre. Tythes compounded, ſmall and great ones, by the lump. The leaſes moſt common are 3 lives, or 31 years. *Tierney bogs* are now done with. The people increaſe conſiderably, notwithſtanding the emigrations, which were great till within theſe 2 years. Their circumſtances vaſtly improved in 20 years; they are better fed, cloathed, and houſed; more ſober and induſtrious in every reſpect. Their food is potatoes and oaten bread, and a bit of beef or bacon for winter. All keep cows, and moſt of them pigs, and ſome poultry; many turkeys and

and geese. No drinking tea. The religion some catholic, but a great many protestants. In 20 years there is a rise of 2d. a day in labour. In provisions there has been a considerable rise; 20 per cent. in meal. A sledge car costs 2s. 2d. Wheel car 1l. 14s. 1½d. A plough 11s. 2½d. A poor man's turf for a year will cost him 20s. Building a sod cabbin 2l. Ditto of stone and thatch 15l.

August 18th, took the road by Swadling-bar for Farnham. That spaw of the north of Ireland is a little village, which appears to be but a poor residence for the numbers that resort to it. I took the Killishandra road, from thence to Farnham; in about 3 or 4 miles it leads along the edge of a lake, through a pretty wood which hangs to the water. Passed Mr. Henry's, a house very agreeably situated amidst woods, which spread to the right and left, and above it. Many lakes are in this country; I passed several large ones, which communicate with each other by a river. The road crosses a variety of bog and moory ground, perfectly improveable; lime cheap, but little seems to be done or doing. At Mr. Nesbit's enter a rich woodland country. The bishop of Kilmore's palace is on a considerable hill, yet sheltered by very fine trees; the country here is beautiful. I had been favoured with an invitation from the bishop, but he was then at Dublin. The woods of Farnham appear very finely from hence. Reached that place in the evening time enough for a ride with the Earl on the borders of

of his lakes. Theſe are uncommonly beautiful; they are extenſive, and have a ſhore extremely varied. On one ſide large thick hedge row trees, with meadows behind them; on the other a moſt noble range of hanging wood, which ſpreads on each ſide to a great diſtance, covering a bold ſhore, and to a conſiderable height, nor are they uniform in their outline; the hills over which they ſpread vary greatly; in ſome places preſenting a continued ſweep, in others, breaking the line, and projecting into the lake. In one part the ſhore conſiſts of graſs incloſures, the hedges ſcattered with trees, and mounting upon the ſlopes, form a very fine ſcenery. Nothing can be more pleaſing than the whole to the right of the lake; the meadows are of undulating lands that wave about in a variety of mild forms; a moſt pleaſing ſcenery. Theſe beautiful fields riſe above the lake, which they command in ſome places, and in others retire from. Upon the whole Farnham is one of the fineſt places I have ſeen in Ireland; the water, wood, and hill, are all in a great ſtile, and abound in a variety of capabilities.

Cabbages Lord Farnham has cultivated 3 years; in 1774, he had 4 acres manured with lime and earth, and of different ſorts, flat dutch, early yorkſhire and greenbore cole, the ſeed was ſown in the ſpring, and planted out in June, in rows 3 feet aſunder, and horſe-hoed clean; found them for milch cows much better than turnips; plough bullocks; alſo fattening bullocks, that had the ſummer graſs, fattened very well on them; laſted till the latter end of February;

bruary; the bore cole longer; the cabbages came to a good ſize, and the crop paid extremely well. Tares and beans were ſown after them, and yielded a great produce.

In 1775, ſix acres, manured with lime and ditch-earth, well mixed, and at planting time, a little dung laid to each root; the ſorts the ſame as laſt year, with ſome red cabbage; the crop very fine, many came to 16 lb. uſed for the ſame purpoſes, and anſwered perfectly well. This year I viewed the crop, and a very fine one it was, clean, well horſe-hoed, and promiſes to be a great produce. Upon the whole, Lord Farnham ſtrongly recommends the culture from experience; if he was to farm 40 years, he would never be without them for his cows, his plough bullock, and for finiſhing thoſe fat beaſts which have had the ſummer graſs; he thinks them far better than turnips; that an acre will go farther, is eaſier cultivated, and got from the land with leſs damage. Nor is this opinion founded from any ignorance of turnips, his Lordſhip lived ſeveral years in Norfolk, and attended to the immenſe advantages reaped in that county from the cultivation of them; he introduced them at Farnham the ſame time as cabbages; they are difficult to cultivate in Ireland, from the ignorance of the people in hoeing; he has drilled part, and had part broad caſt; the drilled much the beſt, from their being ſo much better hoed; drills in furrows two feet aſunder; I ſaw this year's crop, and found them very fine, clean, and promiſed to be good. Since this was written, Lord Farnham informs me, that in 1777, he

he had 14 Iriſh acres of turnips, which kept 50 working, and fattening oxen, and dairy cows, beſides 60 fat ſheep; ſome of the oxen were ſold fat from them, at from 17l. to 20l. each; the Lancaſhire breed that had been worked. The ſame year he had one acre of carrots, which he applied to feeding horſes, and inſtead of giving 4 barrels of oats a week, they had only one, the reſt being deducted on account of the roots. That in England, he fed his whole ſtud with them, nor would the horſes touch an oat, while they could get carrots. Waſhing he found ſo expenſive, that to leſſen it, he put them in baſkets in a ſtream, and this ſaved half; the ſoil not light. They were left in the ground, and drawn in the winter, as wanted.

Lord Farnham mentioned one circumſtance of turnips, new to me, which was his feeding his horſes in Norfolk with them. His brood mares, and hacks, of which he had a great number, ran in the park at Hunſton, with his bullocks, that were fattening on turnips, and they followed the carts as eagerly as the beaſts; had no other food, and did perfectly well on them. His Lordſhip has made great improvements in ſome of his lands by means of hollow draining. Very wet clays, over-run with ruſhes and other aquatic rubbiſh, he has converted into dry ſound healthy paſtures. The principal drains are filled with ſtones, the leſſer ones with ſod.

In the breed of cattle he has been equally attentive, having been at a conſiderable expenſe to procure the very beſt Lancaſhires; and what is

is uncommon, without ſpoiling his dairy: for his cows give much milk. After falling off a good deal, they make 6 or 7lb. of butter each a week, beſides ſupplying his numerous family with milk and cream. The bull-calves he rears for oxen, works them till they are ſix years old, and then fattens them. Draft oxen he finds infinitely more beneficial than horſes. The breed of ſtrong horſes he has alſo been very attentive to improve, buying a ſtallion of Mr. Bakewell, and has bred many, which ſell readily at 25l. each, at 4 years old.

In planting, Lord Farnham obſerved at Farnham, that no tree grows to ſo large a ſize ſpeedily as the ſilver fir. He has many of a great ſize, planted by his father about 40 years ago, in a wet clay ſoil on a rock; we meaſured ſome of them 12 feet in circumference at the ground, and one 7½ at 5 feet high: this tree contains 76 feet of ſolid timber. What is very uncommon, he pointed out many oaks that are deſtroying the Scotch firs planted with them, having outgrown and riſing completely above them. This I do not remember having noticed before. In the ſame plantation the beech generally beats the Scotch fir and the aſh, though the latter ſuits the ſoil very well; indeed the beech oak and ſilver fir are the capital trees. One uſe he has put the ſilver fir to, in which it anſwers perfectly, which is boat-building; he has a boat built of it, which has laſted as well as if of the beſt oak. This is a hint which may prove of infinite uſe. I remember Mr. Mitford in

Hampſhire flooring his library with ſilver fir, freſh cut down, and the boards not contracting in the leaſt: a quality very valuable in ſhip-building. He can ſell Scotch fir out of his woods readily at 40s. a ton, even very poor trees.

The ſoil about Farnham is in general a good loam, from 4 to 10 inches deep, and under it a yellow or blue clay 2 feet deep, and under that a ſlaty gravel, a quarry of lime-ſtone, or blue whin-ſtone. It is in general very wet; hollow drains lay it dry, if there is a fall. From Cavan to Belturbet it is dry rough rocky ground. From Killiſhandra to Knockwinn, dry gravel. From Cavan to Virginy, heathy, which yields good corn, with lime. Rents by new leaſes in general, 14s. to 20s. old ones 5s. to 10s. Cavan and Kilmore the higheſt. There is a great deal of bog and mountain, which with lakes, amount to half the county. Average rent about 6s. by another account I had, it is 7s. 6d. Farms are generally about 100 acres, 50 to 100, and theſe re-let, from 2 to 10 acres, to the poor people, who are cottars, and pay their high rent by labouring.

Courſes: 1. Summer fallow. 2. Wheat. 3. Oats or Barley. 4. Potatoes. 5. Wheat or barley.

1. Fallow. 2. Wheat. 3. Oats. 4. Oats. 5. Oats. 6. Oats. 7. Oats. 8. Oats. 9. Lay out for graſs. No ſeeds ſown.

1. Potatoes. 2. Potatoes. 3. Flax. 4. Oats. 5. Oats. 6. Oats. 7. Lay out for graſs.

They

They ſow 4 buſhels of wheat, or 20 ſtone an acre, and it yields 7 barrels. There is a good deal ſown, and ſeveral flower mills in the country. Of barley they ſow 4 buſhels, and get 9 barrels, 16 ſtone to the barrel. They ſow 8 buſhels of oats, and get on an average 10 barrels. Of potatoes they plant 14 barrels to the acre, each 20 ſtone, and the crop is uſually 60, and the price 5s. to 10s. Average 7s. 6d.

Rent	0	16	0
14 Barrels	5	5	0
Planting, 36 men a day, at 1s. no board, 6d. with it	1	16	0
Shovelling, 8 men	0	8	0
Weeding, 10 boys, at 4d.	0	3	4
Taking up, 72 men	3	12	0
Manuring	1	0	0
	£. 13	0	4

PRODUCE.

60 Barrels, at 7s. 6d.	22	10	0
Expenſes	13	0	4
Profit	£. 9	9	8

But little lime uſed in the country, though in ſome places lime-ſtone is plentiful; the price is 6d. to 10d. the barrel ſlack. Much marle uſed about Ballyconnel and Killiſhandra; the white light ſort from under bogs: they uſe it on heathy moors with ſucceſs, for which purpoſe they uſe lime alſo. Before they plough it, they lay the lime on, 150 barrels roach, and

then either ſow oats, or plant potatoes, and this perfectly kills all the heath, (*erica vulgaris*) and makes very fine land after it. Upon dry heathy ground at Ballyconnel, Mr. Swan, Lord Farnham's manager, has ſeen heaps of lime-ſtone laid on the heath near kilns, and has remarked that where this ſtone was laid without burning or breaking, there the heath was completely killed, and a full crop of white clover (*trifolium repens*) came up, from the duſt that had rubbed off; a ſtrong proof that pounded lime-ſtone would be an admirable manure. The ſtock farmers, who, however, are not large ones, 150 acres being a good farm, are many of them in the ſucceſſion buſineſs of buying in young cattle, and ſelling them out older without fattening; others on better lands, buy in dry cows in May, and ſell them fat in November, making from 30s. to 40s. a head. But few fat bullocks, nor is it a great ſheep country, nor any dairies; but all the little farmers and cottars, keep one, two, or three. If they pay for grazing a cow, it is 20s. to 30s. They keep alſo many pigs, from one to five, in every houſe. They plough all with horſes three or four in a plough, and all abreaſt. Here let it be remarked, that *they very commonly plough and harrow with their horſes* DRAWING BY THE TAIL; it is done every ſeaſon. Nothing can put them beſide this, and they inſiſt, that take a horſe tired in traces, and put him to work by the tail, he will draw better: quite freſh again. Indignant reader! this is no jeſt of mine, but cruel, ſtubborn, barbarous truth. It is ſo all over Cavan.

Land

Land ſells at 22 years purchaſe, rack rents: it has fallen 2 years. Rents have fallen within 4 or 5 years conſiderably; thoſe that were taken 7 or 8 years ago, have fallen from 3s. to 8s. an acre. Tythes are generally hired by proctors, who view the farmers crops, and compound with them, making a conſiderable profit by it. They ſcrew up the poor tenants and people very ſeverely. The people are in general in much better circumſtances than ſome years ago; more induſtrious, better fed, cloathed, and lodged: they increaſe very much. Potatoes, and milk and butter, are their food, and oaten bread when the potatoes are not in ſeaſon: ſcarce any fleſh meat among the poor. The linen manufacture conſiſts principally in ſpinning, which is univerſal all over the county for girls and women; but weaving is by no means general, nor does it increaſe in this neighbourhood. A woman, by ſpinning, will earn 4d. on an average. They do not raiſe enough for ſupplying their wheels, for much is brought from Dublin. There are four bleach greens in theſe parts, at Ballyconnel, Ballynagh, Scrabby, and Ardvagh. Building a mud cabbin 4l. 4s. ditto of ſtone, lime and ſlate, 30l. ditching, 6 feet wide and 5 deep, 1s. 1d. a drain 2 feet deep and 3 wide, 2d. to 3d. a perch. Threſhing wheat 1s. a barrel. Oats 7d. Barley 8d. Farming man's wages 5l. A lad 3l. to 4l. A woman in ſummer 6d. a day. A wheeled car coſts 11. 10s. A plough 9s. A pair of harrows 12s.

Auguſt 20th, took my leave of Farnham, and paſſed by Cavan to Granard; got in that neighbourhood,

bourhood, into a fine tract of dry, ſound, gravelly land, which lets, on an average, at 1l. 1s. through the barony: uſe it very much for fattening ſome bullocks, cows chiefly, and a few ſheep. The farms are in general large, many about 200 acres. It is all a lime-ſtone gravel. In the town of Granard, is one cloſe of 50 acres, called Granard Kiln, immediately under a mound of earth, an antient Daniſh intrenchment, which regularly ſupports 50 fat cows, 100 ſheep, 6 horſes, and is reckoned the beſt ſpot in the county, worth 35s. an acre. The country, all the way from Cavan to near Carrickglaſs, within 2 miles of Longford, is exceedingly bare of trees.

Reached Ballynogh, the ſeat of W. G. Newcomen, Eſq; who has many trees, and well planted hedge-rows, about him; he favoured me with the following particulars: about that neighbourhood, lands let at 13s. 6d. from 7s. to 20s. The rent of the whole county of Longford may be reckoned at 12s. an acre, on an average, of all that is cultivated, and one-ſixth part bog and mountain, which yields no rent. The ſoil is, in general, a tolerable vegetable mould on the ſurface, for three or four inches deep; under that, two-inch thick of blue clay: which retains water under that yellow clay for two or three feet, and then every where lime-ſtone gravel. This is generally the ſoil of the whole county, except the barony of Granard, and a part of the county, called the Callaw, which is a light lime-ſtone rocky ground, producing fine wheat, and good ſheep.

Leitrim

Leitrim lets at 4s on an average. In Leitrim there are many mountain improvements, by ſetting fire to the heath in ſummer, liming it the following ſpring, marling upon that, and then plant potatoes, get great crops, and make fine land of it. The ſize of farms riſe commonly to 5 or 600 acres, but the general ſize is about 100 acres, with many ſmall ones: *Rundale*, or the hiring of farms in partnerſhip, is very common, three or four families will take 100 acres. A great part of the country is let to tenants who do not occupy, but re-let at advanced rents to the poor people. The courſe of crops is: 1. Potatoes. 2. Potatoes. 3. Bere. 4. Barley, or Oats. 5. Oats. 6. Lay out for weeds, four or five years.

1. Potatoes. 2. Bere. 3. Oats. 4. Oats. 5. Lay it out.

1. Potatoes. 2. Flax. 3. Bere. 4. Oats. 5. Oats.

Of potatoes, they ſow four barrels to an acre, each 64 ſtone, and get 40 in return; the price 5s. to 14s. average 8s. Of bere they ſow 20 ſtone, and get 10 barrels. Of barley ditto, get 12. Oats they ſow 2 barrels, at 14 ſtone, and get 15. The waſte mountains are improving very faſt, by families hiring ſpots of heath, building their cabbins on them, and improving them under a rent of 5s. to 8s. an acre. They bring it all in by potatoes, but uſe no lime, though they could have it cheap, for lime-ſtone is on the ſpot, and plenty of turf to burn it with; this is the caſe with Cornclanew, near Carrick Glaſs. White marle is found under the bogs, but ſcarce any of it uſed. The ſyſtem of cattle moſt common, is to buy yearlings, at 40s. and keep

keep them till three or four years old, and ſell them lean at 5l. to 5l. 10s. buying in ſome every year, and ſelling out the ſame number. Fatting cows is alſo very common, bought in in May, at 3l. to 5l. and ſold out in October, at 30s, to 40s. profit. It is not reckoned bad land, if three acres fatten two. No cows for dairies, they are kept only by little people. Ploughing all with horſes, a pair a-breaſt, but no drawing by the tail; this practice they utterly deny here. Land ſells rack-rent at 18½ years purchaſe. Let for ever and well ſecured, 20 years purchaſe. The price has fallen within four years; rents have alſo fallen three ſhillings in the pound in ſix years, and are at preſent falling, from the low prices of grain. Tythes taken generally by the proctors, who are very civil to gentlemen, but exceedingly cruel to the poor. The country evidently encreaſes very much in population: the people are in better circumſtances than they were 20 years ago, better cloathed, better fed, and more induſtrious; yet at preſent it is found, and I have had the ſame remark made to me, at many other places, that they only work to eat, and when proviſions are plenty, will totally idle away ſo much of their time, that there is ſcarce any ſuch thing as getting work done. The religion is principally Roman; no emigrations. There is a better yeomanry than is common in Ireland. Many farers, of from 100 to 250 acres. Rent of a cabbin and garden, 30s. A cow's graſs 1l. 10s. All the cottars have ſome land: all keep cows, and many pigs and geeſe. I remarked for ſome time

of

late, that the geeſe are plucked, and upon enquiry, that every gooſe yielded three farthings or a halfpenny in feathers per annum. They make a dreadful ragged figure. The poor live upon potatoes and milk, it is their regular diet, very little oat bread being uſed, and no fleſh-meat at all, except on an Eaſter Sunday, or Chriſtmas-day. Their potatoes laſt them through the year; all winter long only potatoes and ſalt. Firing coſts them 30s. a year for labour in the bogs. Building a mud cabbin, 4l. Ditto of ſtone and lime, 37 feet by 15, 17l. Another, 40 feet by 14, 11l. Theſe are the meaſures of two, which Mr. Newcomen has built at that expenſe. The linen manufacture ſpreads through Longford. It has encreaſed conſiderably, from a remarkable circumſtance which happened three years ago, which was a gentleman unknown, giving 500l. to be diſtributed to poor weavers, in loans of 5l. each, to be repaid, at 25s. a quarter, to enable them to carry on their buſineſs with more eaſe. This had great effects. There are three bleach greens in the county; the weaving increaſes; ſpinning is univerſal throughout all the cabbins, and likewiſe through all the county of Leitrim, but there is not ſo much weaving as in Longford.

Auguſt 21ſt, to Strokeſtown, the ſeat of Thomas Mahon, Eſq; Paſſed through Longford, a chearleſs country, over an amazing quantity of bog, and all improveable; a great one in particular, on the banks of the Shannon, two miles over, and I found it reached many miles beyond Laneſbro'.

Laneſbro'. Mr. Mahon has 500 acres of it. A great fall lies every way, a good road is made over it, and lime is burnt on the edges for 3d. a barrel roach; beſides lime, they have lime-ſtone, gravel and ſand every where, which laid on the bog, drained or not drained, produces a ſheet of white clover; what a field is this for improvement, yet nothing done! Croſſed the Shannon, which is here a conſiderable river, and entered Connaught, The firſt appearance of Strokeſtown woods are very noble, from a hill which looks down on them; they are very extenſive, of a great growth, and give a richneſs to the view, which is a perfect contraſt to the dreary ſcene I had paſſed. Mr. Mahon neglected no means of having me well informed in the following minutes. Land about Strokeſtown ſets at 25s. The average of the whole county is 11s. including bog; mountain there is very little. The county of Leitrim, 2s. on an average. A great part of Roſcommon, particularly from Athlone to Boyle, 30 miles long, and 10 broad, is ſheep-walk, and lets on an average, 12s. an acre. It is generally walk, only patches of potatoes and corn for the workmen. The ſoil of it lime-ſtone. Theſe ſheep-walks I had heard ſo much of, that I was eager in my enquiries concerning them; they were ſome years ago divided into much larger farms than at preſent, for there were men who had 20,000 ſheep, whereas now 6 or 7000 is the greateſt flock. The farms riſe to 3000 acres, few under 4 or 500. They ſtock commonly at the rate of two ſheep an acre, and reckon the profit to be lamb and wool, the lamb ſold

in

in Auguſt, at 12s. and 5lb. of wool from the ewe, at better than 1s. per lb. or 17s. a head.

They feed them all the year on graſs, having no turnips; but in ſevere weather give them hay. They have much other cattle with them, ſuch as yearlings, two year olds, three year olds, &c. ſelling them four year olds to ſuch as want them for fattening. In wet years they are in ſome places troubled with the rot, but it is not at all common. Theſe ſheep walks decreaſe as the people become more numerous: parts are ploughed up, but very few inſtances of ſheep gaining upon tillage. The cottars are never ſuffered to keep ſheep, but have cows grazed for them, as in other parts.

This part of the country is not populous, but more ſo than it was. Theſe ſheep-walks are here reckoned much better than the Curragh of Kildare. They are not regular in ſtocks of ewes, but keep a various ſtock. A man that has 1000 ſheep will have 400 ewes, 200 yearlings having ſold 200 of the worſt lambs, 200 two year olds, and 200 three year old weathers, which he ſells fat; conſequently his annual ſale will be 200 lambs, 200 fat wethers, and 100 of the worſt old ewes.

200 lambs, caſualties and miſſing reducing them to 150, at 10s. -	75	0	0
200 fat wethers, at 20s. - -	200	0	0
100 old ewes 10s. - -	50	0	0
Wool, 1000 ſheep, 4s. - - -	200	0	0
£.	525	0	0

The

The country is divided into incloſures by ſtone walls generally, ſo that one ſhepherd is all that is kept to a flock. The wool goes moſtly to Corke, where it is ſpun into worſted and exported; this is the account I had in this country. All theſe ſheep-maſters mix, as I before obſerved, other ſtock with their flocks; beſides 2 ſheep per acre, they will keep at the rate of 40 yearlings, and 2 or 3 year olds to every 100 acres. The ſoil is brown loam on limeſtone gravel. Farms about Strokeſtown conſiſt generally of *Rundale* ones, upon 2 or 300 acres, there will be 10 to 15 families, nor is it thought here a bad ſyſtem. Much the greateſt part of the land is graſs; but what they have in tillage they arrange in the following courſe:

1. Potatoes. 2. Potatoes. 3. Flax. 4. Barley. 5. Oats. 6. Lay out for 6 or 7 years. None of them ſow graſs ſeeds.

1. Potatoes. 2. Potatoes. 3. Wheat. 4. Oats. 5. Oats. 6. Lay out.

Much land is let for graſs, potatoes at 5l. 5s. 4l. and 4l. 4s. afterwards for a crop of flax. They plant 4 barrels, at 5½ cwt. each; and they get about 50 barrels an acre, the price from 4s. to 15s. average 8s. To ſell them on the foot growing 10l. is reckoned a high price. Of flax ſeed they ſow 11 pecks per acre, or a hogſhead 2 acres; an acre ſold *on the foot* (that is as it grows) is worth 8l. on an average. They commonly ſow a barrel, or 20 ſtone of wheat to the acre

acre. Mr. Mahon only 12. They get 6 in return. They ſow 2 barrels of barley, and get 9. Of oats they ſow 2 barrels, and get 10. Lime ſtone gravel the great manure; they put 1500 load, at 5 cwt. each, on an acre, and it coſts 1l. or 1l. 1s. It does beſt on ſtrong land, eſpecially free ſtone; it will laſt 7 years, in which time they will take 7 crops. Of lime they uſe no great quantity; but when they do, lay 50 barrels an acre. Mr. Mahon compared different quantities of it, from 50 to 100, and the more was laid the better it was, but the lime-ſtone gravel better than any of them. About Strokeſtown, Mr. Mahon can have turf in one hole and lime-ſtone in another, and he burns it in arched kilns, with ſeveral eyes, the ſtone 15 deep over them, and 200 barrels of lime to each eye; it burns in 60 hours, each eye takes 10 clamps of turf, at 4s. each, including drawing, each clamp 30 kiſhes. Quarrying and breaking, burning, filling, and building and emptying, 2l an eye, in all 4l. for 200 barrels roach, or about 5d. a barrel. They have both white and grey marle under the bogs, the light ſort, but the gravel and ſandy lime-ſtone is ſo much better that nobody uſes it. They plough with 4 horſes 2 and 2 abreaſt. Mr. Mahon, with 2 abreaſt by boys, taught by a ploughman he had from Bury in Suffolk, who by ploughing in that manner, without a driver and with a Suffolk plough, did as much in one day as the country people in three: by teaching lads for Mr. Mahon and his neighbours, was the means of very much improving the tillage of the neighbourhood.

hood. Land ſells at 21 and 22 years purchaſe: it let within 3 or 4 years at 5 per cent. leſs than 15 years ago, but it is now riſing. Tythes are ſometimes taken in kind, but more commonly ſet to the farmer. Wheat 8s. Flax 8s. Oats 3s. Barley and bere 8s. Much land let to thoſe who do not occupy it, but who re-let it to others at an advanced rent.

The linen manufacture of ſpinning is ſpread not only through Roſcommon, but all Connaught, and in Roſcommon they raiſe flax enough for their own uſe; weaving is creeping in by degrees, about a twentieth part of their yarn is woven in the country, into linens of 10 or 12 hundred, and ſheetings half quarter wide, at 10d. to 1s. 4½d. a yard. The yarn ſpun is moſtly 2 hank yarn. A woman will ſpin 6 hanks a week, of 4 hank yarn, at 4d. a hank, 4d. a day by 4 hank yarn, and 3d. a day by 2 hank yarn. The people are upon the increaſe, but not much; they are better fed than 20 years ago, and better cloathed, but not more induſtrious, or better houſed. They live on potatoes and milk, and butter. Scarce any but what keeps a cow or two; they are not allowed to keep pigs in general, but many will a tolerable quantity of poultry. The rent of 1 acre, and a houſe, is 20s. the graſs of a cow 1l. 2s. The men dig turf, and plant potatoes, and work for their landlord, and the women pay the rent by ſpinning. Great riſe in prices, butter one-third, beef one-fourth, poultry one-half. Price of a car 1l. 14s. a plough 10s. 6d.

Oak

Oak timber 3l. 3s. to 5l. a ton, aſh ditto 2l. to 3l. elm ditto. A mud cabbin 5l. 5s. ditto ſtone and ſlate 15l. A maſon's perch of a wall 4s. Near Caſtle Plunket, a bog of Mr. Arthur Irvin's, let at 1l. 2s. 9d. a perch, 160l. per acre, it is 21 deep of fine turf.

Mr. Mahon's woods are all of his own planting, and having beſides 100 acres, a vaſt number of hedge-rows well planted round many incloſures, which join thoſe woods, they all take the appearance of uniting into one great range of plantations, ſpreading on each ſide the houſe. It is one of the ſtrongeſt inſtances of a fine ſhade being ſpeedily formed in the midſt of a bleak country that I have any where met with, being a perfect contraſt to all the neighbourhood. He began 35 years ago with aſh, which trees are now 70 to 80 feet high.

But the generality of the plantations are from 17 to 30 years old, and are for that age, I think, the fineſt woods I ever ſaw; they conſiſt of aſh, oak, Engliſh and French elm, beech, maple, ſpruce, Scotch and ſilver fir, larch, &c. Of all theſe the beech are the fineſt trees, and of the greateſt growth, many of them 3 and 4 feet in circumference, and 30 to 40 feet high. The bark is bright and beautiful, and every tree gives the ſtrongeſt ſigns of agreeing perfectly with the ſoil. One very particular circumſtance of this tree, Mr. Mahon tried, which deſerves the attention of thoſe who have deer; he made a plantation

tation of all ſorts of foreſt trees in his park, in order to ſee how far the deer would let them eſcape: they eat up every tree he planted, the beech alone excepted, not one of which did they touch either leaf, branch, or bark; it was 18 years ago, and they are all now as fine trees as ever were ſeen. Next to the beech, the largeſt tree is the ſilver fir, of which he has many in 20 years, of a great ſize. After this the oak, which thrives admirably well; then the Engliſh elm. But the tree which outgrows theſe and every other he has planted but 5 years, is the Lombardy poplar. The growth almoſt exceeds belief! In 5 years they are 35 feet high, and I ſaw many of 2 years old 12 feet, and the year's ſhoots 5 or 6 feet. His hedge-rows, Mr. Mahon has planted with uncommon attention, the ditches are ſingle, with a row of trees among or above the quick, another row on the back of the bank, and a third on the brow of the ditch; theſe, with a lofty growth of the quick, form ſo thick a ſhelter, that one cannot ſee thro' it, ſo that almoſt every incloſure has the appearance of a field, ſurrounded by a wood. Of theſe incloſures thus planted, he has 16 of from 6 to 20 acres each. Mr. Mahon's breed of both cattle and ſheep are improved by a bull and a tup, which he bought of Mr. Bakewell; and has bred from them with great ſucceſs. He is in the ſucceſſion ſyſtem, which is, buying in a certain number of yearlings every year, and killing the ſame number fat, from 5 to 7 years old: but in common they are only kept till 4 or 5.

At

At Clonells, near Caſtle rea, lives O'Connor, the direct deſcendant of Roderick O'Connor, who was king of Connaught 6 or 700 years ago; there is a monument of him in Roſcommon church, with his ſcepter, &c. I was told as a certainty, that this family were here long before the coming of the Mileſians. The poſſeſſions formerly ſo great are reduced to 3 or 400l. a year, the family having fared in the revolution of ſo many ages, much worſe than the O'Niel's and O'Brien's. The common people pay him the greateſt reſpect, and ſend him preſents of cattle, &c. upon various occaſions. They conſider him as the prince of a people involved in one common ruin.

Another great family in Connaught is Macdermot, who calls himſelf prince of Coolavin; he lives at Coolavin in Sligo, and though he has not above 100l. a year, will not admit his children to ſit down in his preſence. This was certainly the caſe with his father, and ſome aſſured me even with the preſent chief. Lord Kingſborough, Mr. Ponſonby, Mr. O'Hara, Mr. Sandford, &c. came to ſee him, and his addreſs was curious: "*O'Hara! you are welcome*; *Sandford, I am glad to ſee your mother's ſon*: (his mother was an O'Brien) *as to the reſt of ye, come in as you can.*" Mr. O'Hara of Nymphsfield, is in poſſeſſion of a conſiderable eſtate in Sligo, which is the remains of great poſſeſſions they had in that country: he is one of the few deſcendants of the Mileſian race.

Since the bounty on the inland carriage of corn to Dublin, much is ſent from the county of Roſcommon, and even farther from Sligo and Mayo; and this buſineſs of carriage was mentioned to me as a proof of the great excellency of the Iriſh car. They carry from 9 cwt. to 12 cwt. with a ſingle horſe that is not worth above 5l. The diſtance from hence is 67 miles, and they are 9 days going and returning: they come back loaded. For 16s. 3d. they will carry a load of any thing to Dublin, without the advantage of any bounty.

Auguſt 23d, leave Strokeſtown, and take the road to Elphin, through a country principally ſheep walks; the ſoil dry ſound gravel, and ſtoney land. Waited on the biſhop, who was ſo obliging as to procure me ſeveral valuable particulars concerning the neighbourhood.

His Lordſhip ſhewed me the particular of his biſhoprick, which conſiſts of very large tracts of land both in Roſcommon and Sligo, from this the rental appears. The total of his particular are, 18,223 profitable acres, 5,382 unprofitable. Rent 1,742l. Fines 1,216l. 23,000 acres, let for 1,742l. muſt neceſſarily be very moderate. Reſpecting ſheep walks, the following is an account of what a farm of 1000 acres is on an average; 2000 ſheep kept on it worth 14s. 100 bullocks, that is, 60 two year olds, and 40 three year olds.

Annual

Annual Sale.

500 wethers, at 20s. to 24s. -	550	0	0
100 culled ewes, at 8s. -	40	0	0
2000 fleeces, 5lb. at 10d. average -	416	0	0
That is 10s. a head - -	1006	0	0
Profit on 100 young cattle -	200	0	0
	£. 1206	0	0
20 acres grafs potatoes let at 3l. 3s. to 4l.			
fay - - -	70	0	0
10 acres meadow fold at 50s. -	25	0	0
5 fillies and colts, at 6l. -	30	0	0
30 acres of wheat, bere and oats, at 5l.	150	0	0
10 acres flax let at 3l. to 4l. - -	35	0	0
	£. 1516	0	0

Expenfes.

Rent -	750	0	0	Produce -	1516	0	0
Cefs -	30	0	0	Expenfes -	1130	0	0
10 men -	80	0	0				
Wear and tear	10	0	0	Profit -	£. 386	0	0
Intereft 2000l. ftock, 6 per cent. - -	120	0	0				
Tythe -	40	0	0				
Loffes on ftock 3s. a head on fheep - -	100	0	0				
	£. 1130	0	0				

Farms in general are from 100 to 1500 acres; and rents from 12s. to 15s. an acre. Ten years ago flocks amounted to 9 or 10,000, but now not above 2000. Average rent of the whole county 10s. From Elphin towards Kingſton, eſpecially near the latter, the ſoil ranks among the fineſt I have any where ſeen. It is a dry ſound mellow ſandy loam, deep and very rich, the herbage excellent. It is generally under ſheep with many bullocks.

To Lord Kingſton's, to whom I had a letter, but unfortunately for me he was at Spaw. Walked down to Longford Hill, to view the lake; it is one of the moſt delicious ſcenes I ever beheld, a lake of 5 miles by 4, which fills the bottom of a gentle valley almoſt of a circular form, bounded very boldly by the mountains. Thoſe to the left riſe in a noble ſlope; they lower rather in front, and let in a view of Strand mountain, near Sligo, above 20 miles off. To the right, you look over a ſmall part of a bog to a large extent of cultivated hill, with the blue mountains beyond. Were this little piece of bog planted, the view would be more complete; the hill on which you ſtand has a foliage of well grown trees, which form the ſouthern ſhore. You look down on 6 iſlands, all wooded, and on a fine promontory to the left, which ſhoots far into the lake. Nothing can be more pleaſing than their uncommon variety; the firſt is ſmall, (Rock Iſland) tufted with trees, under the ſhade of which is an antient building, once the reſidence of Macdermot. The next a mixture of lawn

lawn and wood; the third, which appears to join this, is of a darker ſhade, yet not ſo thick but you ſee the bright lawn under the trees. Houſe iſland is one fine thick wood, which admits not a gleam of light, a contraſt to the ſilver boſom of the lake. Church iſland is at a greater diſtance; this is alſo a clump, and riſes boldly. Rook iſland is of wood; it opens in the center, and ſhews a lawn with a building on it. It is impoſſible to imagine a more pleaſing and chearful ſcene. Paſſed the chapel to Smithfield Hill, which is a fine riſing ground, quite ſurrounded with plantations; from hence the view is changed; here the promontory appears very bold, and over its neck you ſee another wooded iſland, in a moſt picturesque ſituation. Nothing can be more picturesque than Rock iſland, its ruin overhung with ivy. The other iſlands aſſume freſh and varied outlines, and form upon the whole one of the moſt luxuriant ſcenes I have met with.

The views of the lake and environs are very fine as you go to Boyle; the woods unite into a large maſs, and contraſt the bright ſheet of water with their dark ſhades.

The lands about Kingſton are very fine, a rich, dry, yellow, ſandy loam, the fineſt ſoil that I have ſeen in Ireland, all graſs, and covered with very fine bullocks, cows, and ſheep. The farms riſe to 500 acres, and are generally in diviſions, parted by ſtone walls, for oxen, cows, young cattle, and ſheep ſeparate. Some of the lands will carry an ox and a wether per acre; rents 15s. to 20s.

Dined

Dined at Boyle, and took the road to Ballymoat; croſſed an immenſe mountainy bog, where I ſtopped, and made enquiries; found that it was ten miles long, and three and a half over, containing thirty-five ſquare miles; that limeſtone quarries were around, and in it, and limeſtone gravel in many places to be found, and uſed in the lands that join it: in addition to this I may add, that there is a great road croſſing it. 35 miles are 22,400 acres. What an immenſe field of improvement! nothing would be eaſier than to drain it, vaſt tracts of land have ſuch a fall, that not a drop of water could remain. Theſe hilly bogs are extremely different from any I have ſeen in England. In the moors in the north, the hills and mountains are all covered with heath, like the Iriſh bogs, but they are of various ſoils, gravel, ſhingle, moor, &c. and boggy only in ſpots, but the Iriſh bog hills are all pure bog to a great depth, without the leaſt variation of ſoil; and a bog being of a hilly form, is a proof that it is a growing vegetable maſs, and not owing merely to ſtagnant water. Sir Laurence Dundaſs is the principal proprietor of this.

Reached Ballymoat in the evening, the reſidence of the Hon. Mr. Fitzmaurice, where I expected great pleaſure in viewing a manufactory, of which I heard much ſince I came to Ireland. He was ſo kind as to give me the following account of it, in the moſt liberal manner:

Twenty

Twenty years ago the late Lord Shelburne came to Ballymoat, a wild uncultivated region, without induſtry or civility; and the people all roman catholicks, without an atom of a manufacture, not even ſpinning. In order to change this ſtate of things, his Lordſhip contracted with people in the north, to bring proteſtant weavers, and eſtabliſh a manufactory, as the only means of making the change he wiſhed; this was done, but falling into the hands of raſcals, he loſt 5000l. by the buſineſs, with only 17 proteſtant families, and 26 or 27 looms eſtabliſhed for it. Upon his death, Lady Shelburne, wiſhed to carry his ſcheme into execution, and to do it, gave much encouragement to Mr. Wakefield, the great Iriſh factor in London, by granting advantageous leaſes, under the contract of building and colonizing, by weavers from the north, and carrying on the manufactory. He found about 20 looms, working upon their own account, and made a conſiderable progreſs in this for five years, raiſing ſeveral buildings, cottages for the weavers, and was going on as well as the variety of his buſineſs would admit, employing 60 looms. He then died, when a ſtand was made to all the works for a year, in which every thing went much to ruin. Lady Shelburne then employed a new manager to carry on the manufacture upon his own account, giving him very profitable grants of lands, to encourage him to do it with ſpirit. He continued for five years, employing 60 looms alſo; but his circumſtances failing, a freſh ſtop was put to the work.

Then

Then it was that Mr. Fitzmaurice, in the year 1774, determined to exert himſelf in puſhing on a manufactory, which promiſed to be of ſuch eſſential ſervice to the whole country. To do this with effect, he ſaw that it was neceſſary to take it intirely into his own hands. He could lend money to the manager to enable him to go on, but that would be, at beſt, hazardous, and could never do it in the complete manner in which he wiſhed to eſtabliſh it. In this period of conſideration, Mr. Fitzmaurice was adviſed by his friends, never to engage in ſo complex a buſineſs as a manufacture, in which he muſt of neceſſity become a merchant; alſo engage in all the hazard, irkſomneſs, &c. of commerce, ſo totally different from his birth, education, ideas and purſuits; but tired with the inactivity of common life, he determined not only to turn manufacturer, but to carry on the buſineſs in the moſt ſpirited and vigorous manner that was poſſible. In the firſt place he took every means of making himſelf a complete maſter of the buſineſs; he went through various manufactures, enquired into the minutiæ, and took every meaſure to know it to the bottom. This he did ſo repeatedly, and with ſuch attention in the whole progreſs, from ſpinning to bleaching, and ſelling, that he became as thorough a maſter of it, as an experienced manager; he has woven linen, and done every part of the buſineſs with his own hands. As he determined to have the works complete, he took Mr. Stansfield, the engineer, ſo well known for his improved ſaw-mills, into his pay; he ſent him over to Ballymoat, in the winter

winter of 1774, in order to erect the machinery of a bleach-mill, upon the very beſt conſtruction; he went to all the great mills in the north of Ireland to inſpect them, to remark their deficiencies, that they might be improved in the mills he intended to erect. This knowledge being gained, the work was begun, and as water was neceſſary, a great baſon was formed, by a dam acroſs a valley, by which means 34 acres were floated, to ſerve as a reſervoir for dry ſeaſons, to ſecure plenty at all times. All the machinery of the mill is perfectly well conſtructed, and worthy of the artiſt who formed it; in general it is upon the common principle of other bleach-mills, only executed in a manner much ſuperior to any other in Ireland, but in ſeveral particulars it is much improved; a waſhing-wheel, on the new conſtruction uſed in England, is added; beetlers are improved in their motion on the cylinder, by giving ſomething more of time to their rebound; the motion given to the rubbing boards is in a manner different from the common, and in general, the wheels are all ſo proportioned, that every operation may go on in the full velocity, without one part being ſtopped at all upon account of another, which is not generally the caſe; the water wheel is alſo formed to work with the leaſt quantity of water poſſible; all the works going on with no larger quantity than will flow through a pipe of a 9-inch bore. Here are two beetling cylinders, three pair of rubbing boards, a pair of ſtocks, a wathing wheel, two large coppers for boiling or bucking, a room for drying, and another for folding,

folding, the whole contained in a well-erected edifice, 81 feet long, by 28 feet broad, and 17 high.

In the firſt year, 1774, not having a bleach-green, he only kept the looms going, to ſell the linen green; 65 in that year worked 1730 webs, each 50 yards long and ſeven-eighths broad, on an average 10 hundred linen. In 1775, the number of looms was 80, and they worked 2110 pieces of the ſame linen. At preſent the number is 90, and preparations are made for there being 120 by this time twelve-month: and Mr. Fitzmaurice has no doubt of having 300 in two years time. In eſtabliſhing and carrying on this manufactory, the increaſe has been by weavers from the north, for whom he builds houſes as faſt as he can, and has many more applying than he can ſupply by building. They come with nothing but their families, and Mr. Fitzmaurice fixes them in houſes, finds them a loom, and every thing neceſſary for their work, and employs them upon his own account; their rent for their houſe and garden being proportioned to their idleneſs.

The full rent he fixes for a ſtone and ſlate cottage, that coſts him 50l. is 40s. if the weaver is idle; but in proportion to the number of webs he weaves his rent is lowered; beſides which encouragement, he gives premiums for the beſt weaving and ſpinning throughout the manufactory.

In

In order to ſhew how far this ſyſtem of employment is of importance to the neighbourhood, I may obſerve that the 80 looms, beſides the 80 weavers, employed 80 perſons more, which are uſually women; quilling, warping, and winding; the quilling by children and half as many children for quilling in all 80 men, 80 women, and 40 children.

The 2110 pieces worked laſt year conſumed 132,930 hanks of yarn, at 63 to each, allowing for accident and waſte, which is ſpun here, and as a woman ſpins a hank a day (it is 3 hank yarn) it employs at 300 days to the year, 443 women.

I ſhould be particular in remarking, that all the houſes he built for the weavers, have no more than half a rood of potatoe-garden to them, Mr. Fitzmaurice finding them a cow's graſs, for which they pay 30s. He does this, becauſe he would not wiſh to have them farmers, which he thinks does not at all agree with their buſineſs of weaving. He has planned much greater works; has procured a patent for a market, which he deſigns to eſtabliſh; to build a large handſome market-houſe, at an expenſe of 1000l. to pull down all the old cabbins in the town, and rebuild them in regular ſtreets, of good houſes, for weavers and mechanics. To convert a large houſe, at preſent uſed in the manufactory, into a handſome inn; a large houſe for a maſter weaver, and laſtly, a manſion-houſe for himſelf in the ſtile of a caſtle, and ſuitable to the ancient

ancient ruins, ſituation, and grounds. For theſe purpoſes, he has employed Mr. Paine, the architect, to give deſigns, and execute the whole. Theſe are great works for the ornament and improvement of a country, and united with the flouriſhing progreſs of the manufactory, promiſe to make Ballymoat a conſiderable place. Too much praiſe cannot be given to a man, who, in the prime of life, when pleaſure alone uſually takes the lead, ſhould turn his attention and expenſe to objects of ſuch national utility and importance, which have for their aim, the well being, happineſs, and ſupport of a whole neighbourhood.

It may be of uſe to inform thoſe who may entertain thoughts of a ſimilar eſtabliſhment, what the expenſe of theſe works have been, with this view I requeſted the particulars of Mr. Fitzmaurice, and they are as follow: forming the reſervoir of water, the bleach-mill, a green, a boiling-houſe, a houſe for the maſter bleacher, and 3 or 4 houſes for bleachers, coſt in the whole 1500l. of this 160l. was for forming the reſervoir. A houſe of ſtone and ſlate ſufficient to contain a family, and four looms, coſts 55l. and the 4 looms 8l. 8s.

In order to ſhew the full expenſe of eſtabliſhing a manufactory, that employs one hundred looms, the following particulars will be of uſe; they will alſo ſhew, that views of private profit

profit have not actuated Mr. Fitzmaurice to this undertaking, as it is nothing but a very ſkilful management, or fortunate prices can make it advantageous to a gentleman, whoſe views ought to be more diſtant, to the increaſe of uſeful population, and thereby of the rental of his eſtate.

The bleach mill and green -	1500	0	0
25 cottages for the 100 looms, at 55l.	1375	0	0
Other building for a clerk and maſter weaver - -	200	0	0
100 looms, yard-wide or under -	210	0	0
Intereſt of that ſum, at 6 per cent. for a year - -	197	0	0
163,800 hanks of yarn, at 63 to each piece, and 26 pieces to each loom, per annum, at five-pence three farthings per hank - - .	3924	7	6
Purging the yarn, one halfpenny a hank N. B. It is now ſixpence-halfpenny, and even raiſing, but that is very high, 5d. is a low price.	341	5	0
1 per cent. on ditto, 3900 for carriage and expenſes - -	39	0	0
Pay of 100 weavers at 3½d. a yard for a ten hundred cloth, or 14s. 7d. a piece, ſay 15s. as they run to 51 yards, 2637	1977	15	0
Pay of a maſter weaver -	100	0	0
Pay of a yarn-buyer and ſorter -	25	0	0
£.	9889	7	6

Needle

Brought over -	£.	9889	7 6
Needle marking 2637 pieces, at 1d. each		10	19 9
As to bleaching, the faireſt way, is to ſuppoſe, that the expenſe of it amounts to as much as the bleachers charge, which is 1¾d. a yard, this includes the bleachers profit, 6s. 4d.½ a piece -		840	10 0
Package 5s. per pack, of 100 pieces, each 25 yards - - -		13	4 0
Carriage to Dublin 20s. a pack of 100		53	0 0
Commiſſion to the Dublin factor 2 per cent. on 5274 pieces, at 1s. 3d. per yard, or 1l. 7s. 1d. a piece, or 8239l. two per cent. on this ſum - -		164	15 0
N. B. On fine goods, 5 per cent. owing to the tedioufneſs of ſelling them, and 5 months credit, inſtead of 2.			
Porterage in Dublin 2s. 6d. a pack - -		6	10 0
	£.	10,978	6 3

Annual expenſe.

Intereſt on the firſt ſtock	197	0	0
Yarn - - -	3924	7	6
Purging and carriage	380	0	0
Weavers - -	1977	15	0
Overſeers - -	125	0	0
Marking - -	10	19	9
Bleaching - -	840	10	0
Package and carriage	66	4	0
Commiſſion -	164	0	0
Porterage -	6	10	0
£.	7692	6	3

As

As the money is turned juſt twice a year, half this is to be charged as ſtock, or	3846	0	0
Buildings - - -	3285	0	0
Therefore the capital for the undertaking is - -	7131	0	0
Intereſt on that at 6 per cent. -	427	0	0
Sundry expenſes on 5274 pieces -	7692	0	0
	£. 8119	0	0

PRODUCE.

5274 pieces, at 1l. 11s. 3d. -	8239	0	0
Expenſes - -	8119	0	0
Remains - -	120	0	0

Hence there appears to be ſome profit on this account, beſides all that is on the bleaching; alſo the rent of 25 houſes, which may be reckoned at 100l. a year.

But if they ſell only at 1l. 7s. 1d. the account would then be:

Expenſes - -	8119	0	0
Produce 5274, at 27s. 1d. -	7141	0	0
Loſs - -	978	0	0

Let

Let me obſerve upon this, that ſuch accounts are never accurate, and they ſhould be taken rather for framing general, than particular ideas. At firſt ſight, it might be thought, that proving too much in the little or no profit of ſuch an undertaking, is proving nothing, as the trade could never be carried on; but this would not be a juſt concluſion. The linen buſineſs is not conducted thus; the drapers, who are bleachers, purchaſe the linen, not weave it on their account; and here lies probably much of their profit, they take advantage of the variation of *times*, to uſe a commercial term, and often get the linen under its fair value; they have the opportunity of taking advantage of all temporary neceſſities among the weavers; but at all events, they know to a farthing the value they can give, and they do not buy a piece more than ſuits them. But if the weaving was done on their account, they would be obliged to make the linen, however dead the market, or elſe have their men idle. Another obſervation which goes generally to all undertakings of this ſort is, that the uniting in one perſon ſeveral branches of a manufacture, will rarely be found advantageous. If every ſtep is a diſtinct trade, alone occupying both capital and attention, the fabric is the more like to thrive. That Mr. Fitzmaurice, with great activity and a good underſtanding, can make himſelf a maſter of the buſineſs, nothing but contraction can doubt; but I queſtion whether the moſt ſagacious draper in Ireland would make conſiderably, if he wove the cloth

cloth as well as bleached it; hence therefore, the part of the preceding calculation the moſt applicable to gentlemen, is the detail of the expenditure of 3285l. becauſe for that ſum, 100 weavers and a bleacher would be ſet to work, to whom the landlord might give what encouragement he pleaſed in bounties per piece, made and bleached, but neither the one or the other on his own account. After all, I ſee every reaſon to aſſert, that a gentleman, for a ſhilling he will ever make by manufactory, will profit a guinea by the improvement of land; have raſcals to deal with in one line, and honeſt men in the other.

Mr. Fitzmaurice obſerves, that the art of bleaching depends ſo much on niceties, and not a little on matter of opinion in the drapers, who buy the linen, that it is difficult to lay down any rules for it; there are ſome points however, which deſerve attention; firſt, in reſpect to the uſe of lime, which though great chymiſts have proved to be perfectly harmleſs and uſeful, if uſed with ſkill and caution, yet the bleachers poſitively deny the uſe of it, whether to indulge the prejudice of the common people againſt it, or for profit in making the worſt aſhes equal to the beſt, cannot be well aſcertained. As to bucking and boiling, it is very obſervable that the fineſt linens being made of the hardeſt and tougheſt fibres of the flax, which ſtand the operation of ſcutching, (which by the way is a very ſtrong reaſon why the fineſt

linens ſhould be incomparably more laſting than the coarſer ones) make a diſtinction between boiling and bucking, the firſt is the moſt ſevere operation, and therefore neceſſary for the tough materials, the other proper for the coarſe and weaker ones. But they are the ſame thing if done with attention; a thorough bucking is equal to a mild boiling, but depending both on the degree in which they are performed. With regard to rubbing boards, the general prejudice to them being founded on fact, can only ariſe from the bleachers ſaving ſoap; if uſed in a proper quantity, there is not the leaſt objection to them.

Account of flax about Ballymoat. The greater part of the poor people about Ballymoat allot about half a rood of land to the growth of flax, the rent 7s. 6d. this is ſown with about five gallons of ſeed, medium price 5s. 6d. the 5 gallons. From breaking and ſcutching, the above yields to the grower, from 84 to 112 cwt. that is, 6 to 8 ſtone. If the flax be dried, as well as broke and ſcutched at the mill, the charge is 16d. a ſtone; if only the two latter, it is only 14d. or if ſcutched, only 10d. After ſcutching, it is worth, rough, 5s. to 6s. a ſtone.

	Dr.				Cr.			
Rent	-	-	0	7 6	Value of 8 ſtone.	-	2	0 0
Seed	-	-	0	5 6				
Breaking, drying, and ſcutching			0	10 8				
Profit for labour	-		0	16 4				
		£.	2	0 0		£.	2	0 0

After

After ſcutching, it is heckled or ſplit into ſmall pieces of different qualities; one half produces the beſt ſort, which is ſpun to about three hank yarn, that is, three hanks to the pound: the half of the remaining half, i. e. one quarter of the whole, is called hackled tow, and is ſpun into an inferior ſort, two hank yarn; the remainder is called *backings*, and is ſpun into the coarſeſt ſtuff, of which is made ſacking, coarſe ſheeting for the poor, &c. At this period the weight is not diminiſhed above 4 lb. in the cwt. and the beſt ſort is worth at a medium, 9d. a lb. the ſecond ſort worth 6d. and the coarſeſt about 1½d. after payment of 1d. per lb. for the two firſt ſorts.

	Dr.		Cr.	
Rough flax	2 0 0	56 lb. heckled of beſt ſort	2	2 0
Heckling	0 7 0	28 lb. at 6d.	0	14 0
Profit	0 12 0	Backings	0	3 0
	£. 2 19 0		£. 2	19 0

The hecklers generally travel about to the houſes of poor people to get this work to do. Four men will be taken up 2 days in doing the above quantity. Spinning is performed by women and children; one diligent perſon will ſpin about one hank, containing 12 *ents*, each ent having 120 rounds, from two yards and a half in circumference in a day. If carried then to market, it generally produces 5d. per hank, or a dozen to the ſpinner, and is generally bought by jobbers or by poor manufacturers.

Upwards of 40,000l. per ann. in yarn is exported from Sligo to Manchester and Liverpool. It is supposed that there is as much yarn exported raw from Ireland, as is manufactured in it. The first step taken by the manufacturer is to steep the yarn in lukewarm water for a day or two; it is then boiled 12 hours in a strong lee of barilla ashes, after which it is bleached for 3 weeks or a month, and when dry, is dressed and softened by being hung in a frame, and rubbed in a clipped stick, after which it is sorted into different degrees of fineness, first by weight, and then by the eye, when it is ready to be delivered to the weaver, with the *reed* and *geers* adapted to manufacturing it. The grist or fineness of the yarn, determines the *set* or fineness of the reed through which it is to be wrought. The reed is divided into *beers*, each beer containing 20 splits, each *split* two *threads*. These threads are called the *warp*. The threads thrown across by the shuttle are called the *woof*. Five beers are what is commonly called a *hundred*, the number of which hundred is regulated by the skill of the manufacturer, so as to make the cloth thick or thin in the breadth: and the number of these hundreds constitutes the fineness and value of the cloth. N. B. The extremities are from 400 splits in the breadth of one yard to 2500. The rule to ascertain the true value of any given piece of cloth by inspection with a glass. Apply the glass to the cloth, reckon the number of threads in the warp, which are magnified by

by the glaſs, and by as many threads as are ſo counted, ſo many hundreds is the fineneſs of the cloth, which hundreds when doubled, and half of the firſt number added, i. e. 10 threads giving as many hundreds, them doubled make 20, and half added 25. Of ſo many hanks of yarn does a piece of cloth of 20 yards conſiſt of, fairly and honeſtly made. Learn the value of yarn, add the weaving and bleaching, and the addition gives the value out of the manufactory.

An Acre.

	£.	s.	d.
Forty gallons ſeed, 1s. 6d. -	3	0	0
Two ploughings - -	1	0	0
Two harrowings - - -	0	6	0
Clodding, four women - -	0	2	0
Weeding, ten ditto - - -	0	5	0
Pulling, twenty women, a day, 3d. and diet, 3d. - -	0	10	0
Binding, four men, 6d. and 3d. diet -	0	3	0
Carrying, ſix horſes, a day, at 1s. 6d. -	0	9	0
Watering and ſodding, ſix men - -	0	4	6
Taking out, four men - -	0	1	6
Spreading, twelve women -	0	6	0
Lifting, twelve women - - -	0	6	0
Carrying, two cars and four men -	0	6	0
Drying, four men and four women -	0	5	0
Twelve kiſhes turf, 8d. - -	0	8	0
Beetling, forty women - -	1	0	0
	£. 8	11	0

Scutching

Brought over -	£.	8	11 0
Scutching, 1s. a ſtone, fifty-ſix ſtone -		2	16 0
Heckling, 8d. a ſtone for the flax, 1d. per lb. for the tow, 4 lb. of the firſt to the ſtone, ſcutched, or 14 ſtone, heckled, at 8d. - -		0	9 4
Three pound of tow to the ſtone, 168 lb. at 1d. - -		0	14 0
Rent - - - -		0	16 0
	£.	13	10 4
If the land is hired ready dreſſed -		11	8 4
Rent - - - -		2	0 0
		13	8 4
This if a cottar, but if not the rent is 3l. which will make it - -		14	8 4
Value of the heckled flax, 7d. to 1s. average 9d. a lb. or 12s. a ſtone -		8	8 0
One hundred ſixty-eight pound of tow, at 6d. - -		4	4 0
Six pound of Backings to the ſtone, 336 lb. at one halfpenny - -		0	14 0
	£.	13	6 0

Very little weaving in Sligo, but a little ſcattered ſpinning every where; the women earn 3d. or

3d. or 4d. a day, by a hank a day. 80,000l. of yarn laſt year exported from the port of Sligo. Price of labour, cottars 5d. others 6d. Heaps of weeds burning all over the country for aſhes for boiling the yarn, by poor people. An acre of weeds has been ſold for 6l. 6s. One ſixth of the county bog and mountain, the reſt 15s. an acre. The farms riſe to large ones, that are grazing, but all the tillage is carried on by cottars, or very inconſiderable ones. The courſes are;

1. Potatoes. 2. Flax. 3. Oats. 4. Oats.

1. Potatoes. 2. Potatoes.

Barony of Corra, the beſt in the county; the high lands all lime-ſtone. Rent about Ballymoat. 20s. Potatoes yield 26 barrels, at the average price of ſix ſhillings, it weighs 10 cwt. Wheat yields ſix and an half, or ſeven barrels. Oats 10 ditto. A great plenty of marle, and lime-ſtone, and lime-ſtone gravel in all the country, but none uſed, except by ſuch as are forced to do it by their landlords. Of theſe the moſt generally uſed is the lime-ſtone gravel. A good deal of mountain, improved by little farmers, by their landlord's directions. John Kelly, a little cottar on Mr. Fitzmaurice's eſtate, is a ſtrong inſtance of this, and his mode of doing it, has been by paring and burning, and ſpreading the aſhes. He then puts in potatoes immediately, gets good crops, then good oats, and would, if he was able, ſow graſs ſeeds.

Sunday, Auguſt 26th, to the Right Hon. Joſhua Cooper's, at Mercra, who not only received

ceived me with the utmoſt politeneſs, but was ſo obliging as to ſend for a neighbouring gentleman, in order between them, with other aſſiſtance, to anſwer all my queſtions, which was done in the moſt attentive and ſatisfactory manner. About which place the rent of land, on an average, 15s. Some of the mountains, that are not lime-ſtone, let for very little, 2s. but the lime-ſtone ones are good land univerſally, and yield almoſt as high rent as the reſt of the country. Farms in culture are exceedingly ſmall, the poor people divide and take them in partnerſhip, four or five to a plough land of 100 acres, but they ſubdivide down to five or ſix acres, and in general all the tillage is done by theſe little occupiers. There are ſome large grazing farms up to above 1000 acres, which are under ſheep and bullocks. One ſeventh of the county may be reckoned bog, and unimproved mountain, and the other 6-7ths, 15s. Mayo one third, perhaps half, bog and mountain, and two-thirds, at 12s. Galway more than one-third bog, mountain and lakes. The courſes of crops purſued here;

1. Potatoes. 2. Barley. 3. Oats. 4. Oats. 5. Oats. 6. Oats. 7. Oats. 8. Left out ſeven years to ſheep.

1. Potatoes. 2. Flax. 3. Barley. 4. Oats. 5. Oats. 6. Oats. 7. Oats. 8. Oats. 9. Lay out.

1. Pota-

1. Potatoes. 2. Flax. 3. Barley. 4. Oats. 5. Oats. 6. Oats. 7. Potatoes.

1. Potatoes. 2. Barley, which is the beſt courſe I have met with in Ireland. Wheat is coming in in the following courſe;

1. Potatoes. 2. Wheat. 3. Oats, 4 or 5 years. Some wheat on ſummer fallow. Graſs land hired for potatoes, at 5l. if not an acre, is

Rent	0	15	0
Ceſs	0	0	4
Tythe	0	0	0
Manuring labour, 20 men, and 3 horſes	1	5	0
Seed, thirty pecks, each 6d.	0	15	0
Putting in firſt digging, 30 men, at 6d.	0	15	0
Second covering, ſhovelling ditto	0	15	0
Third ditto, fifteen men	0	7	6
Weeding, eight men	0	4	0
Digging up, ſixty men a day	1	10	0
Picking and gathering, one man to four	0	7	6
Carrying home, five men and five horſes	0	5	0
Picking over and ſhifting	0	5	0
	£. 7	4	4

PRODUCE.

300 pecks, 56 lb. each, at 6d. per peck	7	10	0

If they, which is very common, hire graſs land for it, the rent is 4l. 4s. on an average, then

Rent	4	4	0
Other expenſes as before	6	9	0
	10	13	0

PRODUCE.

PRODUCE.

Three hundred and fifty pecks, at 6d.	-	8 15 0
Profit	-	£. 1 18 0

Many are planted in bogs that are drained; they are the firſt thing they plant, manuring with both lime-ſtone gravel and dung, the firſt will not do alone, very little dung will do: the crops are ſuperior in quantity to thoſe from any other land, they will get 50 pecks more than from the graſs land. They feed their cows and pigs with them when plentiful. Mr. O'Hara of Nymphsfield fatted many bullocks with them, and found that they did exeeedingly well. Of barley they ſow a barrel per acre, which is here 14 ſtone, and get on an average 14 barrels an acre. In Terrera barony they get great crops, ſometimes 20 barrels an acre. They ſow 2 barrels of 12 ſtone of oats, the mean produce 10 barrels, ſome not above 5 or 6. Of wheat they ſow 12 ſtone, and the crop 6 barrels. Every body ſows a patch of flax; a farming cottar, with 6 or 7 acres, will ſow 6 or 8 gallons. The quantity of ſeed 40 gallons per acre. The value ſold *on the foot* is in general 8l. and the crop is calculated that a gallon of ſeed produces a ſtone of ſcutched flax, or 40 ſtone per acre. The quantity of waſte improved is very conſiderable; it is moory mountain, about 12 inches deep. In much of this, immediately under the moor, is a thin ſtratum of what they call *lack-clay*, which is like baked clay, the thickneſs of a tile, and no water gets through it. Under it lime-

lime-ſtone gravel. Trenching the land for potatoes, breaks this ſtratum, and lets the water through at once, and no other drains are neceſſary. In leſs than a century, almoſt the whole country, as well as Roſcommon, was a moor. The mode taken has been by lime-ſtone gravel chiefly, and this goes on ſo much, that the moors are worth a conſiderable rent; the crops they give at firſt are very great. The expenſe of gravelling is 2l. 2s. an acre. 2000 horſe-loads in baſkets on their backs is the quantity, it changes the nature both of moors and clays intirely, and laſts for ever.

In this country there are large tracts of graſs land, which will rear the largeſt oxen, but will not fatten them; but if gravelled, will fatten them perfectly. Lime not uſed as a manure in common, though there is an amazing quantity in the country; the price of burning will be four-pence halfpenny a barrel of roach lime. A barrel of turf will burn a barrel of lime; a barrel of turf is one-third of a kiſh. Turf mold laid on a clay meadow will give one good crop. The ſyſtem of cattle is various; the graziers upon good graſs buy in cows in the month of May, at 3l. 10s. average, and ſell out in November and October, at a profit of 1l. 10s. alſo buy oxen 3 year old in October, give them coarſe hay, and ſell them fat or in good order the autumn following; buy in at 4l. 10s. and ſell out at 7l. and he will take for meadow half an acre of hay, and one and a half for ſummer; beſides which there will be one ſheep and

and a half per acre the year through, which will pay 12s. Upon worſe land they go into the ſucceſſion ſyſtem, which is buying year olds at 25s. on an average: theſe, as well as the preceding for cattle, which at 4 year old come to 5 cwt. which is the common ſize of the county. He keeps them 3 years, and ſelling them lean at 4l. 10s. but theſe ſyſtems are always united on the ſame farm, as they have all ſorts of cattle to ſuit different ſoils. No dairies.

The ſheep ſyſtem is not of conſequence, for there are ſcarce any flocks kept. Twenty years ago the baronies of Corra and Terrera were continued ſheep-walks; but now the former is all potatoes and barley, and much of the latter is broken up, ſo that upon the whole tillage has gained very much on graſs. The ſheep there kept are both fattening and breeding; they keep their lambs till three year wethers, and ſell them fat at 16s. that is, 18lb. a quarter, at 2d. a lb. The ewe lambs will be kept, and old ewes culled and ſold off half fat, at 10s. The fleeces on the average of the whole will be 4lb. Mr. Ormſby gets 8 and 10 lb. from his wethers. Swine increaſing, no pork exported from Sligo till laſt year, but now they are getting into it. Horſes are uſed for tillage only, 4 in a plough abreaſt, and ſome harrowing ſtill done BY THE TAIL; they will plough half an an acre a day, or more commonly three days to an acre. Upon wet lands they plough into ridges arched, but never water furrow. They know nothing of cutting chaff, but let the wind blow that of their crops away. As to hiring and

and ſtocking farms, they manage ſo as to do without capital; a grazier will re-let to his cottars as much of his land as high as he can; enough to pay his rent or near it, and as to the poor fellow, he manages with very little. 3l. per acre will do for buying the cattle for a grazing farm.

Land ſells at 20 years purchaſe, rack rent. The rents are leſs than 5 or 6 years ago, but are rather riſing at preſent. Tythes are generally taken in kind; they are let to tythe proctors, who are paid wheat 8s. Barley 6s. Oats 4s. Flax 8s. Potatoes none tythed in Connaught. Hay 3s. Leaſes 3 lives, or 31 years. Much of it let on leaſes renewable for ever. Middle men, who occupy none, is a practice declining, but not gone out. Two bolting mills erected, which begin to encreaſe the crops of wheat, and promiſe to change the face of the country. The people throughout it increaſe very faſt moſt undoubtedly. Their circumſtances in general are infinitely better than 20 years ago; they are cloathed and fed better, are much more induſtrious; ſpalpeens going from hence decline much, and will ſoon be entirely out. Rent of a cabbin and garden 20s. The graſs of a cow 30s. There were ſome emigrations to America, but not conſiderable, and ſome of them are come back again. The religion in general catholic; but more proteſtants than in any other county in Connaught. In the baronies of Liny and Corra, there are many Mileſian Iriſh; in Mayo more ſtill, all of the Spaniſh breed. The food of the poor people is potatoes,

toes, milk, and herrings, with oaten bread in ſummer; all keep cows, not pigs, and but a few poultry. They have an abſolute bellyfull of potatoes, and the children eat them as plentifully as they like. The average price of oatmeal ſomething leſs than 1d. a pound. All of them have a bit of cabbages. They prefer oat bread both to potatoes and to wheat bread. All afford whiſkey. A year's turf will coſt a family 30s. The common people are ſo amazingly addicted to thieving every thing they can lay their hands on, that they will unſhoe the horſes in the field in the barony of Liny; they are alſo lyars from their cradle, but wonderfully ſagacious, cunning, and artful.

Within 10 miles of this, in Leitrim, is a great country of good coal near the ſurface; but for want of being well worked, ſells at 7s. a ton: and near Ballyſodare is a lead mine, but not worked with ſucceſs, though very rich. As to the linen manufactory, it has made ſome progreſs; there are 6 bleach greens in the county, and there are many weavers. Spinning is univerſal in all the cabbins. A woman will earn two-pence halfpenny at it. The rents are moſtly paid by yarn.

Mr. Cooper has reclaimed, and is reclaiming 65 acres of bog, which is 12 feet deep, and was ſo wet and rotten, that no animal could go on it without being ſwallowed up: much of it had been ſo mangled and cut in holes to get turf, that the levelling in order for the plough was put out at 1l. 10s. an acre. A great drain

was

was made round it 9 feet broad at top, 10 deep, and quite narrow at bottom, and repeated theſe drains, but not ſo large at the diſtance of 60 yards from each other. A drain of 9 feet wide at top, and 6 deep, coſts 10d. a perch. The above drains were done by the day. In one year after, the bog was dry enough to plough, which he did, and burnt the furrow and ſowed rape: the crop middling, eat it with ſheep. The ſecond year ploughed and burnt it again, and had a ſecond crop of rape; after which another year of rape and turnips, and it now lies with the graſſes that came of themſelves after theſe operations: it is but indifferent, except in one place where ſome lime-ſtone gravel was ſcattered, and there it is good, promiſing well. Adjoining the bog is a wet ſpringy bank full of ruſhes, from which Mr. Cooper apprehends the water comes that breaks out in the bog, which it does in a few places, for want of the ſurrounding drain on that ſide being completed. To ſuch as have bogs to improve, he would recommend to ſurround the ſpace to be improved with a drain ſo deep as to go to the gravel, which is a point he thinks very neceſſary; as when this is done, if there is any fall at all for the water, the drain will keep open, and not cloſe up, as it will do if not ſo deep, for want of a hard ſurface for the water to run off on. A year after this work, plough it, burn the furrow, and ſow rape for ſheep food, levelling the land by ploughing and burning; and repeat this till level, or if there is any dung, potatoes is much the beſt crop, and will be a great produce. As ſoon as the land is level,

ſow

ſow oats and hay ſeeds, and when there is a ſkin of turf gained, then carry on the lime-ſtone gravel in preference to every thing elſe, if it is to be had: the effect of which is ſo ſtrong as to change heath to white clover at once upon drained land. The more ſoapy the gravel is the better: and Mr. Cooper, from experience, knows that it would then ſet as meadow at 30s. an acre as long as it was kept from returning to its original ſtate. As to the quantity of draining, cutting it into oblongs of 300 yards by 60, would be fully ſufficient: theſe have laid his bog dry.

Turnips Mr. Cooper has cultivated theſe 17 years regularly, with great ſucceſs, for ſtall-feeding oxen, and has found them of great uſe. Cabbages he has had theſe four years, the Scotch ſort, borecole, and Reynold's turnip-cabbage; theſe he has uſed for fattening ſheep, and never had ſuch ſheep as by this means. He prefers cabbages to turnips, much for all uſes, can get larger crops, and what he gets goes farther, and are much preferred by both cattle and ſheep: after them, he has got exceeding fine barley. In the breed of cattle Mr. Cooper has taken pains to improve by means of a Lancaſhire bull, of Mr. Parker's breed, and this with ſuch ſucceſs, that his cattle are all very fine, large, and well made; all Lancaſhire long horns, with a mixture of the Stafford and Warwick. He has alſo found that this improvement of the breed for fatting has not hurt his dairy, for his cows give 8 quarts of milk at a meal, which is eſteemed very well here: for fattening the breed is excellent

cellent. Oxen he has uſed for tillage, &c. 18 years, inſtead of horſes; works them in common yokes, and bows 4 or 6 in a plough; but he thinks that four horſes will do more work in a day than four oxen: yet finds the latter incomparably the moſt profitable. Mules he finds of the greateſt uſe. They are much longer lived than horſes, hardier, eaſier fed, and more profitable: but this is principally applicable to the ſmall Iriſh mule, and not the large ones from Spaniſh aſſes, which are not ſo hardy, and more liable to diſorders. They are never fed ſo well as horſes, yet go through more labour: and are much ſuperior to them for carrying burdens. One caution, however, ſhould be uſed in relation to their food. If wheat ſtraw is cut into chaff and given, it will kill them; the late biſhop of Elphin loſt all his mules by it. Mr. Cooper has fattened many hogs on potatoes, and he has found that raw potatoes will fatten them very well, but the fat will be flabby and greaſy: but if the potatoes are parboiled, and well ſprinkled with ſalt, the fleſh will be firm, and perfectly good. He once tried fattening a cow on them, and ſhe did admirably, but eat ſo much, that at the very loweſt price it would not anſwer to give them. He has improved much land by hollow draining, has done it with ſods, and found that it anſwers perfectly.

Sligo is the only ſea-port of this country, and the ſtate of its trade may be taken, as no bad explanation of the improvement of the country around it with which it communicates.

A view of the duties on imports and exports in the port of Sligo for twenty years, ending Lady-day, 1775.

Years.	Imports.			Exports.		
1756	£. 1208	11	4	£. 26	11	7
1757	216	12	0	15	13	10
1758	425	10	1	23	11	11
1759	504	11	6	45	1	0
1760	518	9	8	45	6	3
1761	384	19	4	51	13	0
1762	640	6	11	73	17	11
1763	1017	11	7	104	17	7
1764	1187	15	3	131	3	2
1765	1458	9	4	102	17	0
1766	406	12	7	120	1	4
1767	486	7	2	92	17	7
1768	1178	12	3	160	8	6
1769	998	14	6	487	17	2
1770	1122	2	4	523	6	7
1771	1554	19	0	309	2	0
1772	841	16	7	471	9	1
1773	2477	17	11	835	11	10
1774	2418	5	4	730	11	4
1775	2256	8	1	956	0	6

Mr. Cooper has remarked, that the great improvement of this part of Ireland commenced about the year 1748, and that rents now are, to what they were before that period, as fifteen to ſix. Some farms bought in 1725, at 5s. 6d. an acre, and 20 years purchaſe, are now let at 18s.

Auguſt 26th, left Mercra, and went to Ballaſadore, when I had great pleaſure in viewing the falls; the river breaks over rocks in the moſt romantic manner, from edge to edge, in many falls, for the ſpace of two hundred yards before it comes to the principal one, which is twelve or fourteen feet perpendicular; the ſcenery about it is bold, the features of the moun-

mountains are great, and Knocknaree in full relief; if the falls were through a dark wood, the ſcenery would be among the fineſt in the world.

To Tanrego, the ſeat of Lewis Irwin, Eſq; (who favoured me with ſeveral articles of uſeful intelligence) ſituated in the barony of Tyrera, which is twenty-ſeven miles long, and cultivated from one and an half to three in breadth, by the ſea ſide; lets from 12s. to 17s. an acre, a little for 20s. The ſoil a light ſandy loam, on limeſtone, one foot to two deep. Farms are in general from 20 to 30 acres; many taken in partnerſhip, four to eight families take 200 acres.

1. Manure with wrack for potatoes. 2. Potatoes. 3. Barley. 4. Barley. 5. Oats.

1. Potatoes. 2. Barley. 3. Oats. 4. Potatoes again.

1. Potatoes. 2. Barley. 3. Oats. 4. Lay out for graſs.

No ſeeds, in one or two years white clover will come if not over cropped. For potatoes, from 100 to 150 horſe loads ſea weed, mix no dung with it. Plant 12 pecks, each 56lb. and get 12 to 20 fold, that is 144 to 249 pecks. Of barley they get 13 or 14 barrels per acre. Of Oats, 10 barrels. They burn vaſt quantities of kelp, in the whole barony, 300 tons, all in ſummer; in winter or ſpring they manure with it. The brown alga, which is the more luxuriant, and fuller of the ſaponaceous liquid, they don't manure with, thinking it too ſtrong for the land, burning it up as they call it; but

if they would lay it in heaps till rotten, or made compoſts, neither of which they ever do at all, this would not be the caſe. They manure with it every ſix or ſeven years. Mr. Irwin ſpreads it in his pound upon a ſtratum of potatoe ſtalks, and over both one of turf and mould, for cattle to tread on to manure, this is a moſt excellent practice. The mountains neareſt to the ſea, are chiefly ſtocked with ſheep, and farther in, with young cattle near the bog. Upon a part of theſe mountains, of three miles in extent, whatever ſheep feed, are immediately killed by the ſtaggers, and horſes affected; there is a good deal of lime-ſtone, and the land is dry, and to appearance, and in fact, good; it fattens bullocks; it is attributed to the lead mines, which this part is ſuppoſed to be full of. When firſt affected, if brought down to a ſalt marſh, it recovers them immediately. Within a few miles of Tanrego, is Glaneſk, and Loch Alt, ſix to ten miles broad, and 20 long, one continued chain of mountain and bog. Three-fourths of Sligo bog, and uncultivated mountain. In the above tract, lime-ſtone every where, in ſome, lime-ſtone gravel, and a good road runs through it; in all this no cultivation or improvements. Mr. Irwin, upon a part of this country, tried about an acre of boggy, moory mountain, to ſee if paring and burning would do, it anſwered greatly, and the beſt potatoes in the country were there next year. Lime he alſo tried, and with great ſucceſs; he did this in order to ſhew the people that their waſtes were improveable. Upon the ſea-ſhore are immenſe beds of oyſter ſhells,

ſhells, which are burnt into lime for building and plaiſtering, as they take much leſs fuel; theſe hills received no little increaſe from all the gentlemen of the interior country coming to the ſea-coaſt to eat oyſters, where having filled themſelves ſufficiently in the mornings, they got drunk in the evening; this was in the *un*civilized times. Moſt of the gentlemen of this country were Cromwell's ſoldiers, and many Welch families, Jones's, Morgan's, Wynn's, &c. In the barony of Tyrera flax is univerſally cultivated; a man with 20 acres will have a rood, which is ſown with five gallons of ſeed; all the females ſpin, but the number of weavers is inconſiderable. Walked down to the coaſt of Tanrego, immediately oppoſite Knocknaree, which riſes very boldly; the bay of Ballyſadore comes up under it, and Ylanabaolane iſland of five or ſix acres, ſo rich, that it will fatten 9 ſheep an acre; it forms Sligo bay.

To Sortland, the ſeat of —— Browne, Eſq; to whom I am obliged for the following particulars.

The barony of Tyreragh, black mold on limeſtone 6 inches to a foot deep, lets at 18s. average. The farms are various, generally taken in partnerſhip, which is found a moſt miſchievous cuſtom, and deſtructive to all good huſbandry. The courſe;

1. Potatoes manured with ſea-weed. 2. Barley produce 15 barrels. 3. Oats 10 barrels. 4. Oats. Very little ever laid out to graſs.

1. Pota-

1. Potatoes. 2. Barley. 3. Oats. 4. Flax on ſpots.

The ſea-weed the only manure, and they depend intirely on it, and apt to do that too much neglecting other parts of management. The circumſtances of the people are not at all improved in 20 years, they are not better fed or cloathed, or in any reſpect better off than formerly. Nor are they at all induſtrious, even of ſea-weed they do not make one half the advantage they could, they might get an hundred loads where they get one. They increaſe in number very greatly, ſo as to be evidently crowded; this has been the caſe particularly ſince inoculation was introduced, which was about ten years ago. They live upon potatoes and milk, and for 3 months in the year, on oatmeal. Mr. Browne is convinced from every obſervation, that the potatoes are a very wholeſome and nouriſhing food. The linen manufacture conſiſts only in ſpinning, which is univerſal in all the cabbins, and it is ſo much, that they are aſſiſted by it, in paying their rents. They earn 3d. a day by ſpinning: one lb. of flax for 3 hank yarn a woman is 4 days ſpinning.

Within a mile of Sortland is a vaſt bog, which ſtretches 10 miles in length, and 2 or 3 over. It is a black one, 16 ſpit deep. There are hillocks in it of lime-ſtone gravel, but lime-ſtone is not to be found near it in general, though not ſearched for with any attention. It is, however, ſo cheap here that any improvements might be worked; Mr. Browne can burn it at 3d. a barrel

rel roach. He hires 1100 acres of this bog, of Mr. King of Ballina, at 4l. a year, though he has not improved it, has no doubt of its being improveable, and remarks that he never yet ſaw a bog that had not a fall enough to drain by. In the barony of Tyreragh, there are a few grazing farmers, but not many. Mr. Neſbit is the greateſt, he farms above 3000 acres. Not a 3d of the county is bog and mountain, but more than half Mayo is ſo: average rent of the whole county, excluſive of bog and mountain, 16s. an acre. The ſhore is a very fruitful one in ſea-weed, which is burnt into kelp in ſummer; they pay a rent for it by the ton of what they get.

From the ſlate quarry to Enniſcrone, 9 miles, they make 200 tons of kelp. The men have 17s. to 20s. a ton for ſerving, making, and burning, and it ſells at 2l. 2s. There is not half ſo much uſed in manure as in burning. It is made all the way from this country to Galway. Mules, Mr. Browne thinks ſuperior to horſes, for carrying back loads, but much inferior in drawing ploughs and cars. They are ſo long lived, that the age is ſcarce ever aſked when they are bought; they will live in common, in full work, to 30 years. They will alſo in bog, draw out their legs infinitely better, though they go deeper in. From 100 ewes, Mr. Browne ſells 100 three year old wethers, fat, at 18s. to 20s. alſo 20 old ewes at 13s. 300 fleeces at 4lb. at 1s. or 45l. Buys in yearling bullocks at 40s. and ſells out at 7l. gets thereby 5l. for keeping 2 years and a half. No hay given, except in ſnow. He has improved

improved 20 acres of dry moor from heath, it would not yield any rent, but now would let for 15s. an acre. The moor was one foot deep on lack clay; and under that a looſe gravel, not lime-ſtone. Marled it at the rate of 150 barrels an acre, which coſt in labour 5s. white marle from under a bog; ſpread it, and left it for a year, which killed the heath effectually, then ploughed it twice, and took two ſucceſſive crops of potatoes, without dung, the firſt an extraordinary one, the ſecond not bad: then two crops of barley, which were very good: then oats, 2 crops, both very good, and then ſet it at 15s. an acre. If he had ever ſuch quantities of ſuch land, he would never ſtop from the improvement of it, being amazingly profitable.

Auguſt the 27th to Ballyna, where I experienced the moſt polite reception from the Right Honourable Mr. King; the views of the diſtant mountains is very fine; the country is almoſt encompaſſed by them. Thoſe of Donnegal to the right, a great ridge, which ſeparates Tyreragh to the left, Nephin-noble in the front, and Knockaree behind. Many kilns for drying corn in the road. Paſſed three miles of paſturage under cattle, before I came to the river leading to Ballyna. The views there are very beautiful, it ſpreads in different reaches. That of Ballyna is uncommonly pleaſing; the river a noble bend to a few riſing grounds on which a part of the town is ſeen; beyond it the bridge, and the whole crowned by the Nephin mountain, which riſes

riſes with a magnificent regularity from its baſe, and is one of the fineſt mountains I have ſeen.

At Ballyna is a ſalmon fiſhery, let for 520l. a year, which is one of the moſt conſiderable in the kingdom; generally ſeventy or eighty tons ſalted, beſides the freſh. Cloſe almoſt to this fiſhery is a very pretty, and well-planted farm, belonging to Mr. Jones. Mr. Lindſay, the owner of this fiſhery, improved 16 acres of moor, covered with heath, in the following manner: he covered it with lime-ſtone gravel, at the expenſe of 30s. an acre, left it two years, by which time the heath was all dead; then ploughed it the end of ſummer, and in a month harrowed it; ploughed it and harrowed it again after Chriſtmas, and in the ſpring ſet it to poor people, for potatoes, at 4l. an acre; they got a very good crop; next year ploughed it, and ſet it for a ſecond crop, reverſing the ridges, at three guineas. After this crop, barley, and got a good crop, ſowing graſs ſeeds with it.

Mr. Gore of Ballyna, had been mentioned to me as one of the moſt conſiderable in cattle of any perſon in Connaught; he was not at home, but his ſon-in-law, the Right Hon. Mr. King, was ſo kind as to procure me the particulars of his domain. Mr. Gore's breed of horned cattle is fine. Some years ago he ſold heifers at 50l. a piece, and now from ten to twenty guineas; the breed not declined, but purchaſers not quite ſo mad as they were. Yearling bulls 20 guineas. This breed he got from Yorkſhire

30 or 40 years ago. His breed of ſheep is alſo excellent, being much improved by rams from England. He improves much moory land and bog, generally 10 or 15 acres every year, by lime-ſtone gravel and marle. Average rent of Tyreragh 12s. Walked in the evening to a moſt noble garden, walled and planted by Mr. King: it is one of the completeſt I have ſeen in Ireland.

Auguſt 28th, took my departure from Ballina, and waited on the biſhop of Killala. I wiſhed to have ſome information concerning that vaſt wild and impenetrable tract of mountain and bog, the barony of Erris. His Lordſhip and Mr. Hutcheſon were ſo kind as to give me every particular in their power. The only cultivated part is the peninſula called the Mullet, where they plant a good deal of potatoes, barley, and flax, by means of ſea weed; and there is a rabbit warren, the ſkins of the rabbits yielding 100l. a year. The reſt of it is without cultivation, except in ſmall patches here and there; and it is ſuppoſed, generally ſpeaking, to be without lime-ſtone or lime-ſtone gravel, but probably no great ſearch has been made in ſo dreary a region. It is no eaſy matter to get in or out of it in winter; and very few perſons ever attempt it from November to Eaſter, having impaſſable bogs in the way. There were 896 families in the barony in 1765, 400 of which are inhabitants of the Mullet: 47 proteſtant, and 849 popiſh. The biſhop of Killalla has built a houſe in the Mullet for a clergyman, who

who reſides there; the living is between 50l. and 60l. a year, and 40 acres of land, which the biſhop has given from the ſee lands. This may truly be called a ſphere for content, and the philoſophic virtues to exert themſelves in; there is not a poſt-houſe, market-town, or juſtice of peace, in the whole barony, which is alſo the caſe with another barony in this county Coſtello. A poſt-houſe and a market are excellent things, but a juſtice may very well be diſpenſed with. There are many herds of ſmall cattle, and ſome ſheep kept, which are ſold from thence. There is not a tree in the whole barony of Erris; a man going out of it to pay his rent, &c. his ſon with him, a lad of near twenty, when he came near Killalla, and ſaw a tree, "Lord, Father! what is that?" But bare of wood as it is at preſent, it was, in the ſylvan age of Ireland, completely covered: for in no part of the kingdom is there found more or larger in the bogs.

The barony of Tyrawly is among the beſt parts of the county of Mayo; 800 bullocks, moſt of them fat, are ſold from it annually at Ballynaſloe fair, which are kept here from being year olds, and ſold at 4l. The quantity of tillage is very inconſiderable, but what there is, is vaſtly improved by the uſe of ſea weed. Lands near the ſea let at 20s. which at two miles, would yield but 14s. merely from being too far, as they reckon, to carry the ſea weed. The poor people in this barony are not improved in their circumſtances in eighteen years paſt, that

that the biſhop has reſided at Killalla. There is ſome weaving, ſo that there is ſcarcely a market at Ballina, or Killalla, without ſome linens ſold. Spinning is univerſal in all the cabbins, but the yarn is only four-hank yarn. They ſpin and weave wool enough to cloath themſelves, with drugget, yard-wide for the women, at 1s. a yard, and frize for the men; at a *ſlatt*, or meaſure, four feet two inches long, and 20 to 23 inches wide, which ſells from 1s. 11d. to 2s. 4d. Their food is potatoes, cockles, herrings, and a little meal; and when the potatoes are out, on oatmeal only. They do not all keep cows, but the majority do, and thoſe who do not, buy milk. Beef 1d. per lb. in autumn, twenty years ago, now three halfpence. Fiſh very plentiful; I partook of three gurnet, two mackarel, and one whiting, at the biſhop's table, which his ſteward bought for ſixpence halfpenny, enough to dine ſix people. Lobſters plentiful. Turbot 3d. a pound. There are 150 boats belonging to the bay of Killalla, or Moy, and to the town, from twenty to twenty-five, five men to a boat, the boat has a fifth, the nets two-fifths, and the crew two-fifths; the two-fifths belonging to the crew, are ſubdivided into ſixths, of which the ſkipper has two. The herrings are caught near the bar, and in the river Moy; the fiſhery begins in October, and laſts only two or three weeks. They judge of the ſhoal being there by the Gant, a bird that purſues the fiſh; they ſometimes get each boat 10,000 herrings, which is a full load, but this is very rare, in general a good night's work is from

from 3000 to 5000, and the price is from thirteen pence to two and ſixpence, the medium 1s. 8d. per hundred, or 16s. 8d. per thouſand; conſequently a night's work 2l. 10s. The boat is 4 ton, and coſts 20l. and the nets 10l. Seven ſhare of nets to each boat; each ſhare ſixty yards long, and four fathom deep, eight ſcore meſh. The nets are all made here; the poor people uſe flax, but others uſe hemp; they bark them, but none tar and oil. The fiſhery was once much more conſiderable than at preſent. There is no ſhip belonging to this port, they had one, but that wicked fellow, Thurot took her, and quite unſhipped the harbour.

Auguſt 29th, took my leave of the good biſhop, to whom, and his ſon, Mr. Hutcheſon, I am obliged for the preceding particulars and many civilities. Breakfaſted with the Rev. Mr. Garrat, at Foxford; paſſed over ſome very fine reddiſh ſandy loams, till I came to a hill, from whence an extenſive tract of bog is ſeen. Rents about Foxford are 12s. for cultivated, arable, and paſture, and thence to Caſtle-bar the ſame. From Foxford to Tubbercurry ſixteen miles of bad country; the beſt of the cultivated land 12s. ſome at 8s. and 10s. but theſe rents are only the improved ſpots: they are improving the moors and mountains very faſt, particularly the eſtates of Mr. Rutledge and Lynch. It is done with white marle from under bogs. It muſt not be imagined that when I ſpeak of mountains and moors in Mayo, or its wild barony Erris, that theſe lands yield no rent; they

are

are let in the lump, and applied to feeding cattle. They put on two year old bullocks, and keep them till full three, when they bring them to the good grounds, and from thence take them to Ballynafloe. Theſe mountains will not do for year olds. Some of them are unhealthy for cattle; for if they are left more than a month or ſix weeks on them, they are diſordered with lumps on their joints, ſo that they cannot riſe from the ground; yet at the ſame time ſhall be in good order, it diſappears on a change of paſture. Red deer run wild in the mountains of Erris.

To Caſtle-bar, over an indifferent country, and a vile ſtoney road; about that town the huſbandry is admirable. They have three cuſtoms, which I muſt begin with; firſt they harrow by the tail, item the fellow who leads the horſes of a plough, walks backward before them the whole day long, and in order to make them advance, ſtrikes them in the face: their heads I trow are not apt to turn. Item, they burn the corn in the ſtraw, inſtead of threſhing it. Among their cuſtoms it may be worth mentioning, that at the wakes or funeral entertainments, in addition to the circumſtances I related at Caſtle Caldwell, both men and women, particularly the latter, are hired to cry, that is, to howl the corps to the grave, which they do in a moſt horrid manner: they are not ſo diſagreeable, however, in Munſter, as I was told. The quantity of whiſky and tobacco conſumed upon theſe occaſions is pretty conſiderable.

derable. In the lake of Caſtle-bar, near that town, is the char, and the Gillaroo trout with gizards, and it is remarkable that there are no pike in the lakes of this country. Land lets at 15s. to 20s. cultivated, both graſs and arable: town parks 40s. The mountains are reclaiming by lime-ſtone ſand and gravel; it is the common cottars who do it. There are more than 500 affidavits ſent to the Dublin Society upon this account, in which I was told they are apt to be deceived, as well as in the corn ſtandings. There are very large farms in this neighbourhood, even up to 2000l. a year: but all the great ones are ſtock farms, and moſt of the tillage of the country is performed by little fellows, cottars, and tenants to theſe large farmers. Eight or nine years ago there were no linens here, but now 300 pieces are ſold in a week, 200 looms are employed in the town and neighbourhood, yet great quantities of yarn are ſent off. The town, which belongs to Lord Lucan, is greatly riſing from manufactures; the houſes are well built, yet only 31 years, or 3 lives granted.

In the evening reached Weſtport, Lord Altamont's, whoſe houſe is very beautifully ſituated, upon a ground riſing gently from a fine river, which makes two bold falls within view of his windows, and ſheltered on each ſide by two large hanging woods; behind, it has a very fine view of the bay, with ſeveral headlands projecting into it one beyond another, with two or three cultivated iſlands, and the whole bounded

bounded by the great mountain of Clara Iſland, and the vaſt region of Crow-Patrick, on the right; from the hill above the wood, on the right of the houſe, is a view of the bay, with ſeveral iſlands, bounded by the hummocks, and Clara Iſland, with Crow-Patrick immediately riſing like the ſuperior lord of the whole territory, and looking down on a great region of other mountains that ſtretch into Joyce's country.

In Lord Altamont I found an improver, whoſe works deſerved the cloſeſt attention; he very readily favoured me with the following account: he began to improve mountain land in 1768, and has every year ſince done ſome, making it a rule to employ whatever labourers offer for work. All of it covered with heath, *(erica vulgaris)* and the ſoil on the ſurface moor; would let for two ſhillings an acre for turning young cattle on, the only uſe to which it was applied.

Experiment, No. 1.

Improved a piece of mountain land, of the above deſcription, by ſpreading lime-ſtone ſand. (N. B. The marle called here *ſand*, is what I have generally found under the denomination of lime-ſtone *gravel*; the ſtones in it are of the ſize of a man's double fiſt, it is clayey, and very hard bound together in the ſtratum; the harder to raiſe, the better it is. It has a ſtrong fermentation with acids.) Spread the ſand on the heath, and left it for one year, at the expenſe

penſe of 1l. 1s. dunged it, and planted potatoes; found great difficulty in digging it from the roots of a kind of graſs, like a ruſh, called *keeb don*, in Engliſh, *black keeb*. The crops very bad. Dunged it the year following for oats; the crop very fine, and repeated them the next year. Left the oat ſtubble, and it covered itſelf ſo with good natural graſs, that the next year mowed a crop of hay, and the ſame two years more. Finding it not well reclaimed from having ploughed it too ſoon after the ſanding, gave it a new manuring at nearly the ſame expenſe; did not plough it any more, but ſuch of the ſtones as had not ſunk of themſelves, were beat in with mallets, at the expenſe of 2s. 6d. an acre, in order to ſmooth it for mowing. This was very practicable, having two ſpits of boggy turf on the ſurface. Ever ſince it has been excellent meadow, worth 1l. 2s. 9d. an acre.

EXPERIMENT, No. 2.

In 1764, improved another piece, ſanding it at 40s. an acre, owing to the diſtance; left it two years on the land, and then ſet it at 40s. to the poor people for potatoes; after which took three noble crops of oats. Then left to graſs, and the firſt year mowed a great crop, and ſet it for 16s. an acre.

EXPERIMENT, No. 3.

In 1765, began with fifty acres more of mountain land, but full of heath. Firſt drew off the ſtones, and made a wall round it ſix

feet high, and the ſtones not wanted for this, threw down the river, ſome of which were ſo large that it took ſixteen bullocks to draw them. Expenſe 30s. an acre, beſides 1s. 6d. a perch for the wall. Dug and burnt it, and ſpread the aſhes, 2l. 2s. an acre; it was before too rough and coarſe to plough. Then ploughed it with bullocks, and ſowed rape; the crop middling, where the aſhes were yellow, good, where white, bad; feeded the rape, and then dug it, and limed it, 160 barrels an acre. Would not uſe lime had not the hill been too ſteep to lead gravel up; he had nineteen lime-kilns burning at once. Upon this liming ploughed for oats; the crop tolerably good. A ſecond crop of oats, which were very fine, and then let it run to graſs; let it at 15s. an acre. Obſerved that the burning brought up a great quantity of ruſhes, which had not appeared before.

Experiment, No. 4.

Another conſiderable piece, where turf had been cut, was manured, part with lime-ſtone ſand, and part with mortar rubbiſh, and another with *graulagh*, or coralline ſhelly ſand; the expenſe each about 1l. 2s. 9d. an acre. Ploughed it and burnt it, and ſowed it with turnips: a very noble crop. Drew the turnips, and fed them in a paſture. The ſpring following planted it with potatoes without any other manure, and the crop much the greateſt he ever ſaw in his life; from one ſtalk had 143 potatoes, then took three crops of oats, which all proved exceedingly

ceedingly good. The black Frizeland oat, and the ſecond crop, yielded 26 barrels an acre, each 14 ſtone. Sowed Dutch clover with the laſt crop, and could let it at 20s. an acre.

Experiment, No. 5.

Another piece of heath mountain, not entirely dry, worth 1s. an acre, manured very richly with lime-ſtone ſand, and at the expenſe of 30s. an acre, and left ſo without any other improvement. In three years it was worth 5s. in eight years 10s. an acre, and in twelve years 1l. 1s. and ſo has remained.

Experiment, No. 6.

Another piece, worth five ſhillings an acre, was ſanded at 1l. 2s. 9d. which was left three years on it, and then planted with potatoes, by the country people, who paid 3l. 10s. an acre. After which it was ſown thrice with oats, the crops very good, left for meadow, and let it at 30s. an acre.

Experiment, No. 7.

Sanded another piece, at 1l. 5s. left it three years, and ploughed it up in dry weather, in May; left it till after wheat ſowing, and then croſs-ploughed it, and in the ſpring harrowed it with great ox harrows, and planted it with potatoes; after which two crops of oats, great crops, and then left it for graſs. Worth immediately 1l. 2s. 9d. an acre.

A curragh of one hundred acres, that is a wet quaking bog, which will not do for turf, with a long ſedgy graſs on it. Part of a farm at 30l. a year, Lord Altamont took into his hands, with the conſent of the tenant; he drained it to the amount of 30l. at 7d. a perch, five feet deep, and ten feet wide; this ſimple thing improved it ſo much, that without any other improvement, he ſet it to the ſame tenant, at 70l. a year. Made perfectly ſound, ſo that bullocks of 8 cwt. could graze on it.

Upon the whole, Lord Altamont is of opinion, from a variety of experience, that the beſt method of breaking up heathy mountain land, is by manuring with lime-ſtone ſand, to the thickneſs of an inch, which at preſent coſts 11. 11s. 6d. per acre. If ſand is not to be had, then the white marle from under moory bottoms; and if there is none of that, then lime. Objects to lime, as it brings the land infallibly to moſs, which is ſo powerful as to choak the graſſes, but marle is an excellent manure. To leave it for three years, or till daiſies *(bellis)* and white clover *(trifolium repens)* appear, then to plough it in May or June, and again in autumn; and in the ſpring to plant potatoes, in the common trenching way, and after the potatoes, would ſow oats ſucceſſively, till the chickweed *(alſine media)* appears, which is a ſign that the tillage has ſo enriched the land, that the crops will be too great, and then leave it for graſs. This is what he has on experience found to be the beſt way. If ſea weed is plentiful,

tiful, he would manure the potatoes with it, and then would have the firſt crop barley inſtead of oats. A large portion of theſe mountains are wet, owing to the lack clay, but the potatoe trenches break it, and let off the water; after which the land ſettles by degrees, and becomes perfectly dry. There are great tracts of many miles extent of heath mountain in this neighbourhood which are capable of the above improvements.

To ſhew what the advantage would be of doing it on a perfect and extenſive ſcale, I ſhall calculate a ſquare mile of ſix hundred and forty acres incloſed in ſixty-four diviſions, ten acres each, and the walls would amount to

5760 perches, two miles of road at 5ol.	100	0	0
Lord Altamont has found that his walls of ſix feet high, two feet and a half wide at bottom, and ſixteen inches at top, built dry, coſt him on an average, 5s. a perch running-meaſure, of 21 feet, including all expenſes, 5760 at that rate -	1442	10	0
Forty gates of Iron, at 50s. Piers, &c. &c. 5l.	200	0	0
Of wood, they coſt 2l. complete			
Ten-acre diviſions would completely clear the land of ſtones,			
Banding at 1l. 11s. 6d. an acre -	984	0	0
	£. 2726	10	0

Brought

Brought over -	£.	2726	10 0
Left for three years intereſt of 1000l. to begin with for that time, at 6l. per cent. -		180	0 0
This is an unfair charge; Lord Altamont obſerved that the improved value would more than pay it.			
Ten farm-houſes, with offices, at 50l. each		500	0 0
Total firſt improvement -	£.	3406	10 0

The potatoes will pay their own expenſes, and 40s. an acre profit. The crops of oats, on an average, 40s. an acre profit, after paying all their own expenſes. Lord Altamont could have this price as rent, for liberty to ſow them.

Profit by potatoes - -		1280	0 0
Ditto on oats, three crops, at 40s. -		3840	0 0
		5120	0 0
Deduct ſeven years intereſt at 6 per cent. on 3400l. - -		1428	0 0
Neat profit		3692	0 0
Original expenſe - -		3406	10 0
Profit - -	£.	285	10 0
Let, on an average, at 15s. an acre, which is what Lord Altamont is clear is the loweſt price it can be reckoned at, it is per annum. - - -	£.	480	0 0

An

An income of 480l. is created without expenſe. This for a landlord: if hired at 2s. an acre, the account will be the ſame, except the deduction of that for rent. I forgot to obſerve, that when the heath dies, which it does in three years, then daiſies appear, and white clover, which are ſigns that the land is fit for culture. There is ſomething very extraordinary in this circumſtance, that laying on a powerful manure for cultivated vegetables, ſhould prove poiſon to the ſpontaneous growth. It is only to be accounted for by ſuppoſing that the heath is nouriſhed by an acid in the ſoil, which being neutralized by the alcali, is no longer the food of that plant, after which it dies for want of its uſual ſupport. It is very remarkable, that all the wild mountains in this country have marks, and to a great height of former culture, mounds of fences, and the ridges of the plough. Lord Altamont's great grandfather found the eſtate a continued foreſt; in 1650, thoſe woods were of much more than a century growth, ſo that no cultivation could have been here probably of 300 years. There is a tradition in the country that it was depopulated by the plague, and upon that the wood ſprung up which formed thoſe foreſts. At preſent there is no wood on any of the hills, except immediately about Weſtport.

I obſerved, beſides this great range of mountain improvement, that Lord Altamont proſecutes various parts of huſbandry with much ſpirit. He has been at great expenſes in introducing

ducing the beſt breed of Engliſh cattle. I had no ſlight pleaſure in ſeeing great compoſts formed of dung and earth, and ſea ore, well mixed together, and then carried into his meadows. Stands were alſo building for corn ſtacks, and under them ſtandings for cows or oxen, and vaults for potatoes: they are executed in the moſt perfect manner. A ſort of oat he has introduced into cultivation, a few grains of which he got by accident, cultivated them carefully in drills, and has got a large quantity now. They are of ſo great a body that he calls them Patagonian oats. He favoured me with a few for ſeed. In introducing the linen manufacture, his lordſhip has made great exertions. He found it to conſiſt principally in ſpinning flax, which was ſent out of the country, without any looms in it, except a very few, which worked only for their own uſe. In order to eſtabliſh it, he built good houſes in the town of Weſtport, and let them upon very reaſonable terms to weavers, gave them looms, and lent them money to buy yarn, and in order to ſecure them from manufacturing goods, which they ſhould not be able readily to ſell, he conſtantly bought all they could not ſell, which for ſome years was all they made; but by degrees, as the manufacture aroſe, buyers came in, ſo that he has for ſome time not bought any great quantity. The firſt year, 1772, he bought as much as coſt him 200l. the next year, 1773, 700l. the next, 1774, as much as 2000l. and in 1775, above 4000l. worth: and this year, 1776, the number of buyers having much increaſed, he will not lay

out

out more than 4000l. the ſame as laſt year. This year he has alſo given ſuch encouragement as to induce a perſon to build and eſtabliſh a bleach green and mill. The progreſs of this manufacture has been prodigious, for at firſt Lord Altamont was the only buyer, whereas for two years paſt there has not been leſs than 10,000l. a year laid out at this market in linen; yet with all this encreaſe, they do not yet weave a tenth part of the yarn that is ſpun in the neighbourhood. The linens made are all coarſe, generally 8 to 1100, from 9d. to 1s. 1d. a yard. They are double webs of 42 yards and upwards, and 32 inches wide; and they earn 1s. a day by weaving it, on an average of workmen. It is of 2½ to 3½ hank yarn, and the ſpinners earn two-pence halfpenny to three-pence halfpenny a day by ſpinning it. The price of it has been in 5 years gradually riſing from four-pence to ſeven-pence a hank. All of it is ſpun of flax raiſed in the country.

The poor in general live on potatoes and milk 9 months out of the 12, the other 3 months bread and milk. All of them have one or two cows; fiſh is exceedingly plentiful, particularly oyſters for 1s. a cart load, and ſand eels, yet they eat none; herrings, however, are an article in their food. In their domeſtic œconomy, they reckon that the men feed the family with their labour in the field, and the women pay the rent by ſpinning. The increaſe of population is very great. Lord Altamont is of opinion that the numbers have doubled on his eſtate in 20 years.

The

The farms around Weſtport are in general large, from 400 acres to 4 or 5000, all which are ſtock farms; and the occupiers re-let the cultivated lands, with the cabbins, at a very increaſed rent, to the oppreſſion of the poor, who have a ſtrong averſion to renting of theſe tierny begs. The ſoil in general is a cold ſpewy ſtoney clay and loam; the beſt lands in the country are the improved moors. Rents riſe from 2s. for heath, to 16s. for good land. Average 8s. about three-fifths of the country unimproved mountains, bog and lake. Great tracts of mountain, but bogs not very extenſive. Clara Iſland 2,400 acres, at 300l. a year; Achill 24,000 acres, at 200l. a year; Boſin 100l. a year, and is above 1200 acres. It belongs to Lord Clanrickard. The courſe of this country, 1. Potatoes, manured with ſea-weed: this is ſo ſtrong that they depend entirely on it, and will not be at the trouble to carry out their own dunghills. On the ſhore, towards Joyce's country, they actually *let their dunghills accumulate, till they become ſuch a nuiſance, that they move their cabbins in order to get from them.* A load of wrack is worth, at leaſt, ſix loads of dung. They do not take half what is thrown in. On the ſhore, open to the Atlantic, there is a leather ſort of Alga, which comes in in the ſpring. The kelp weed grows only where it is ſheltered. The coaſt of Lord Altamont's domain and iſlands let for 100l. a year for making kelp.

1. Potatoes. 2. Barley. 3. Oats. 4. Oats.
1. Pota-

1. Potatoes. 2. Barley. 3. Oats. 4. Flax.

1. Potatoes. 2. Barley. 3. Oats.

Potatoes they meaſure by the barrel of 12 cwt. and in each barrel 16 pecks of three quarters each. They plant 10 buſhels, of 3 cwt. each, at the average price of 12s. a barrel, or 1s. per cwt.

Expenſe of an acre.

Manuring with ſea weed		1	1 0
Rent		0	8 0
County ceſs and pariſh charges		0	1 0
Seed		1	10 0
Planting, 30 men a day		0	15 0
Shovelling 10 ditto		0	5 0
Weeding 3 ditto		0	1 6
Taking up, and carrying home, 60 men		1	10 0
Sorting, &c. 3 men		0	1 6
	£.	5	13 0
They will not carry ſea weed above a mile; if dung is uſed, the expenſe will be		2	2 0

PRODUCE.

Twenty barrels, or twelve tons, at 12s.		12	0 0
Expenſes		5	13 0
Profit	£.	6	7 0

A man,

A man, his wife, and four children, will eat a bushel of 3 cwt. every week: in 39 weeks, therefore, they eat 117 cwt. or 5 ton, 17 cwt. this is just half an acre for a family. Of oatmeal, the common allowance is a quart of oatmeal a day for a labourer. A mower that is fed is allowed that quantity, and 6 quarts of butter milk a day, or as much *bonny clobber*. To explain what this is I must observe, that they set the milk three days for the cream to rise, and having then skimmed it, the milk that remains is as thick as blamange, and as sour as vinegar, and this is bonny clobber.

Of barley they sow 6 pecks, each 21 quarts, and the crop is generally from 20 to 30 fold, or at 25 it is 150 pecks. Of oats they sow a barrel of 24 stone per acre, and they get 6 such barrels. Of flax they sow 40 gallons, and it will sell in common *on the foot* at 8l. they find that it enriches the land. No wheat sown but by gentlemen for their own consumption. *They burn their corn, instead of threshing it.* The grazing system is generally the succession, buying in at year olds, or if the lands are very bad, two year olds; keep them till four year olds, and then sell them lean at Ballinasloe. They give 10s. 6d. to 3l. 10s. for yearlings; average 40s. For two-year olds, they give 3l. They sell for 6l. what they gave 2l. and for those they gave 3l. they will sell at four-year olds for 6l. They keep but few sheep, but generally buy year-old wethers; *boggerils* in May, at 8s. to 10s. each, shear them and turn to the mountains;

mountains; bring them on to their arable lands in winter, ſhear them again the following year, and ſend them to the mountain again, and in the following ſummer ſhear again, putting them on their beſt paſtures, and ſelling fat at Ballinaſloe, at 15s. or 16s. their fleeces 5 lb. at 1s. a pound. There are ſome dairies, as far as ten or twelve cows, which are employed for butter. Twenty years ago cows were lett for 1 cwt. of butter for the year, and rearing the calf. Very few ſwine kept, and of a bad kind. They plough all with horſes, four in a plough, directed by a man, walking backwards, who to make them move forward, ſtrikes the beaſts in the face. Young colts they harrow with by the tail. Twelve horſes are neceſſary for one hundred acres in tillage. They winnow their corn in the road, and let the wind blow away the chaff.

Lord Altamont mentioned deſcriptive of Mayo huſbandry, acts of parliament to prevent their pulling the wool off their ſheep by hand; burning their corn; ploughing by the tail; in hiring and ſtocking farms, the common computation is, three rents for a grazing one. Land ſells at twenty-one and twenty-two years purchaſe, at rack rent. Rents have fallen within five years, 1s. in the pound; they are at preſent on a balance, with a tendency to riſe. Tythes are compounded in the lump. Leaſes, three lives, or thirty-one years, alſo twenty-one years. Much land let to thoſe who re-let. The rents in Mayo are trebled in forty years. No emi-

emigrations. Farms are generally let in partnerſhip, but the term *Rundale* not known. Labour generally done by cottars, who have land let to them, or graſs for cows, under agreement to work for the landlord. Proviſions, which the poor eat, not riſen, but butchers meat doubled. They pluck their geeſe alive every year. All carriage done by horſes with baſkets: the bottoms of which faſten with ſticks, and let out the load. The induſtry of the people very much increaſed; an aſtoniſhing change in induſtry, ſobriety, &c. and are in much better circumſtances in every reſpect, than twenty years ago. They have a practice common among them, which ſhews an increaſing civility in the change from Iriſh names to Engliſh ones. Even ſirnames, for inſtances *Stranaghan*, Iriſh for *birds*, which they call themſelves. *Markahau*, Iriſh for a *rider*, which name they take; *Cullane*, Iriſh for a *whelp*, which name they aſſume; others call themſelves *Collins*. *Conree*, Iriſh for a *king*, which they call themſelves; *Ruddery*, a *knight*, and many others. Among Lord Altamont's labourers, is one Mowbray Seymour; his great grandfather was maſter-worker of the mint at London. There are many Mortimers, Piercys, &c. and within a few years, a Plantagenet, in the county of Sligo. Eagles abound very much in this country, and do great miſchief, by carrying away lambs, poultry, &c. they alſo watch the ſalmon jumping, and ſeize them even out of the water, by darting with that celerity, of which they are ſuch maſters; this is ſo common,

mon, that men with guns are ſet to kill and frighten them.

Auguſt 30th, rode to Roſshill, four miles off, a headland that projects into the bay of Newport, from which there is a moſt beautiful view of the bay on both ſides; I counted thirty iſlands very diſtinctly, all of them cultivated under corn and potatoes, or paſtured by cattle. At a diſtance, Clara riſes in a very bold and picturesque ſtile; on the left, Crow Patrick, and to the right, other mountains. It is a view that wants nothing but wood.

Auguſt 31ſt, to Newbrook, over a various country, part waſte, and much cultivated. About Caſtle-Burk, the road croſſed a moſt remarkable ſtoney natural pavement, regularly ſurrounded with graſs trenches, all on a flat. Paſſed the ruins of a very fine abbey; reached Holymount, Mr. Lindſay's, a very conſiderable grazier; about which place, the ſoil is in general, a ſtoney clay, from ſix inches to two feet deep, on lime-ſtone gravel; it is quite dry ſound land, and the ſtones are lime-ſtone. Lets from 12s. to 15s. an acre. Farms are very extenſive, up to three or four thouſand acres, all ſtock ones, with portions re-let to cottars, who are the principal arable men here. They are in the ſucceſſion way, buying in year-olds at 40s. keep them till three or four year olds, ſometimes only keep them two years, they pay about 20s. per annum, on a medium. They are ſold, at whatever age, for ſtores to the graziers in the

the rich countries. Another ſyſtem is, to buy in cows in May, at 2l. 12s. 6d. to 3l. and make about 1l. 10s. profit. A cow will take an acre, but there will be an after-graſs, worth 5s. an acre, for ſheep. The ſheep ſyſtem is breeding and ſelling three-year old wethers fat, the wool, and the culled ewes. Above half the county bog, mountain, and lake. Folding ſheep, I ſuppoſe, will come in here, for they have got very near it. They drive their ſheep to a ſpot of graſs, which they let for graſs potatoes, at 3l. 10s. to 5l. an acre, doing this at night, till the land is well dunged. The crops are eight tons on an average:

1. Potatoes. 2. Bere, if ſanded, 8 to 10 barrels. 3. Bere. 4. Oats, 8 to 10 barrels. 5. Oats, 8 barrels. 6. Oats, 8 barrels. 7. Flax. 8. Wheat. 9 Sand for the bere, if for potatoes the ſand does hurt, unleſs it lies two or three years on the graſs. 3 cwt. the barrel of bere, the ſame, which is ſurpriſing. 4 cwt. of wheat.

September 1ſt. to Tuam; dined with the Archbiſhop. All this country is a good ſound lime-ſtone land, and famous for ſheep; but upon enquiry, I found it did not materially vary from the neighbourhood of Holymount, or Moniva, whither I was going in the evening. Reached Mr. French's, at that place, to whoſe very obliging attention I am indebted for the following intereſting particulars: he has improved 60 acres of bog, and 290 of moor, which he began

began in the year 1744, with a great red bog, from 20 to 30 feet deep, ſo wet and ſpongy, that no turf, fit for burning, could be found to cut in it, ſo very wet and looſe, that a man could not go on it without jumping from tuft to tuft; no heath on it, except at the verge; the only ſpontaneous growth red and white moſs.

The following account of this great improvement, Mr. French ſent to the Dublin Society. It was never publiſhed. I inſert it therefore with the utmoſt ſatisfaction.

BOG RECLAIMED.

Copy of a letter to the Dublin Society, for which they granted him a gold medal.

DEAR SIR,

Moniva, Jan. 24th, 1769.

ALTHOUGH I have not hitherto applied for a medal or premium, yet for above 20 years paſt, during which time the works I deſcribe have been carrying on, I have obſerved the uſeful hints of the Dublin Society, tried many experiments recommended by them, and have followed their inſtructions, which have turned to my pleaſure, profit, and advantage. I obſerve, that it is neceſſary to lay before the Society the quality of the bog, and the method purſued in reducing it, but fear their patience may be tried upon the preſent occaſion.

The caſtle of Moniva, now part of my dwelling-houſe, is very ancient, and was built for a place of defence; it ſtands upon a dry gravelly ſoil, which, like a peninſula of five acres, run between two very high, red, deep, wet bogs, impaſſable for any beaſt of burden, very difficult even for men to paſs. The bog, on the north ſide, contained above 13 acres; the other, on the ſouth, is of a great extent. The eaſt ſide of the caſtle was defended by a deep winding river, a few perch beyond which was a large extent of extreme wet red impaſſable bog, ſo high as to prevent from the lower rooms of my houſe, a view of the country beyond it, and of a great part of an high iſland of land of about 15 acres, which lay towards the middle of the bog. A large old wood, which ſtands on 111 acres, in a ſemicircular form, partly round a lawn of 70 acres, upon a gentle riſing dry ground, defended the weſt of the caſtle. The river, on every heavy rain, overflowed to the verges of the bogs, and very near to the caſtle. That I may not aſſume too much of the following improvements to myſelf, I muſt let you know, that my father formed a ſcheme to turn the courſe of the river through the great eaſt bog, which was from 26 to 28 feet above its level, and made a conſiderable drain through the bog for the purpoſe. He alſo made a deep mearing drain, near a mile in length from the river, through the large ſouth bog, and divided about 90 acres thereof, by croſs wide and deep drains, into 5 diviſions, and by two drains through

through the north bog, laid out an approach, 7 perch wide, to his houſe, but his life proved too ſhort to execute his extenſive ſcheme.

Upon his deceaſe, in the year 1744, I firſt purſued his plan to turn the courſe of the river, widened the drain made by him to 27 and 30 feet, according to the height of the bog, and ſunk the drain to the gravel, where I could do ſo, and in ſome parts two and three feet deep into the gravel, which proved exceſſive hard. In other parts of the drain, the bottom of the bog was much lower than the level of the river, in which parts, as the water could not be drained off, there was no digging to the gravel. The ſides of the drain were ſo high, that I was obliged to cut them in ſome parts into benches, in the form of ſtairs, to prevent the men at the bottom from being overwhelmed, which would once have happened, only that a man ſtanding on the ſurface, obſerving the bog to burſt, gave the alarm, by which he ſaved the lives of ſeveral men; for in a few moments many perches in length of the drain were filled up to the top, more difficult to be again ſhovelled out, than if it had not been cut before; it required ſometimes four or five men ſtanding upon different benches to convey what the loweſt ſhovel took up to the top, beſides the neceſſity of removing the ſtuff from the edge of the drain, to prevent the frequent burſtings in of the bog. The greateſt difficulty was to draw up prodigious large roots of fir trees, which lay firmly fixed

and very ſound, juſt over the gravel, at the bottom of the bog all along the drain. This I effected, by laying two large beams from the top, ſo as to form an inclined plain to the bottom: then drove down into the bog above, a ſtrong beam perpendicular, and made it firm by ſtones; to this, I fixed a great pulley, and another pulley to the root below, firſt ſeparating it by hatches and iron crows from its large arms, which run under the bog: then by running a cable through the pulleys, the united ſtrength of 16 or 20 men drew up the largeſt roots along the ſliding plain. The men as they drew up the roots, uſually ſtood upon the firm gravel at the bottom of the drain, the top being in many places too ſoft for footing.

Having completed the drain or water-courſe, which is above ninety perches in length, through the great eaſt bog, I ſet about making a ſtrong bank, from the eaſt to the ſouth bog, 20 perches in length, and from 15 to 50 feet broad acroſs the old river, which was 16 feet deep. For this purpoſe I drove down a row of long wooden piles, and a ſecond row acroſs the river, and made the bank by filling up the intermediate ſpace with ſods well rammed and preſſed down.

I had the ſatisfaction to obſerve, when I had made a ſecond bank, at the lower or north end of the new drain, to prevent the water from returning back into the channel of the old river, but at much leſs expenſe than the former coſt,

coſt, that the river run its new channel, that I immediately gained about 10 acres of fine bottoms for meadows upon each ſide of the old river, and as the new river was three or four feet higher than the old, I obtained a fall for a mill, which I obſerved might be increaſed, by running a deep drain through the north bog for a tail race, which would alſo contribute to reclaim that bog: this I perfected, run it 11 feet wide down to the gravel, 94 perch in length, and in ſome parts into the gravel, to preſerve the level. I built a bleach mill, the firſt built in the province where the fall lay, and the bog ſince reclaimed about it, is part of the green for bleaching linen.

From my new river, to a lake which lay about 230 perch to the eaſt in the great bog, I cut a large drain of that length, to ſupply my mill with water from the lake, when the river ſhould prove low in ſummer. This work was thought to be impracticable, the bog between being many feet higher than either the lake or the river, but I know that the lake was higher than the river; indeed, for the firſt and ſecond year, it proved impracticable, the drain, though laid out above ten feet wide, ſtill filling up as it was made: but by perſeverance, and ſtill opening the drain at the end where the fall lay, at length the lake, to the ſurpriſe of many, run into the river, and gave me a new command of water. The whole bog, in ten years time, ſunk amazingly, and diſcloſed to me, from the windows of my houſe, the proſpect of a country

try which could not be ſeen from them before; but works of this kind require patience and perſeverance: for at the end of three years, when curioſity led me to ſee the effects of a great flood after a very heavy fall of rain, I had the mortification to ſee the great bank, which I made acroſs the river, float away, like a boat before me. The neighbours, who for years paſt had inſiſted that my father and I had undertaken an impracticable work, applauded their own judgment upon the occaſion, and endeavoured to diſſuade me from any further purſuit; but inſtead of following their advice, I immediately provided a boat, (for horſes and cars could not, without great difficulty, be brought to the place) and with its aſſiſtance conveyed ſtones ſufficient to fill up the channel of the old river, the breadth of the bank, and afterwards, by bog ſtuff brought by boat, and ſunk in the front of the bank, I made it ſtaunch; then raiſed it by ſod work, and planted trees on the top of it, by which means it has remained firm, and anſwered my whole deſign for theſe nineteen years paſt. When I erected my mill, and made ſluices to keep up the water for it, I obſerved that my new river thereby became navigable for a boat, as well as the old river, and that it might prove very advantageous for the conveyance of manures, if a communication was made from one to the other; but this was difficult, as the new river, in time of flood, was four or five feet higher in its level than the old river, yet I overcame the difficulty, by cutting a navigable line 16 perch in length, where was

firm

firm gravel at the bottom, from river to river, and built a water lock at the edge of the new river, where I found a firm foundation at the bottom of the bog. It anſwered my purpoſe, gave me a great command of water; for by opening the ſluices of the lock, I can at any time overflow my meadows, which lie on each ſide of the old river: it has ſtood now for about 18 years. When I obſerved the advantages which aroſe from being able to convey manures by boat, I proceeded, and cut a navigable line 30 perch long, 20 feet wide from the new river, above the great bank into the ſouth great bog, and cut another navigable line 32 perch long, 12 feet wide, from the old river northward into the north bog, and another navigable line through the ſame bog weſtward, in a winding direction, for the ſake of beauty, 50 perch long, and 20 feet wide; and cut another line 21 perch long, and 14 feet wide ſouthward, from the weſtern line, which brings my boat into my farm-yard, and enables it to proceed through all the navigable lines which communicate with each other. Several ſprings of water roſe from the uplands, which lye weſt of the north bog, and probably were the cauſe of that bog in the before-mentioned navigable line, which run towards theſe ſprings. I built a ſecond water-lock, and turned an arch over it, as it ſtands in one of the approaches to my houſe; by ſhutting the gates of this lock, the ſprings which run into the river, being intercepted, a ſheet of water overſpreads near two acres in my lawn, which lies between the wood and my houſe, and

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the boats are thereby enabled to go to the highlands, where there is plenty of gravel to manure the bogs. I made my navigable lines by banking out the water, and keeping the drains empty by ſcrew pumps of about 13 feet long, which were worked by two men relieving each other day and night, which my own carpenter made, and alſo built my locks before he had ſeen any thing of the kind, until he admired his own works. Whilſt I was executing the works which I have deſcribed, I proceeded to reclaim the bogs adjacent to them. The lines I have mentioned divided the north bog into 4 parts, which I incloſed by ſmaller drains into ſo many little parks; it is entirely reclaimed, and has been for ſeveral years paſt under tillage and meadow, and yet, now, though it has ſubſided conſiderably, an iron borer of 18 feet, does not in ſeveral parts thereof reach the bottom of the bog: it was full of holes, out of which turf for fuel had been formerly cut, the levelling of which added much to the expenſe of reclaiming. The eaſt bog, from the iſland to the old river, is all reclaimed, except two or three acres towards the ſouth, and has likewiſe been under tillage and meadow for ſome years paſt. I reclaimed theſe two bogs, by covering the ſurface with lime-ſtone gravel, then laid a coat of dung over it, and planted potatoes upon the dung; the next year ſowed oats, or rye and graſs ſeeds, and the following year mowed the produce: the bog was ſo wet, that I cut ſeveral ſmall drains, which I ſince filled up, when they had

had performed their office. To lay the gravel on, I was obliged to make roads with hurdles, to bear up ſmall horſes, which carried the gravel in baſkets upon their backs, and to remove the hurdles from place to place, as occaſion required; the boats laid the gravel and manures upon the ſides of the rivers and the drains, from whence the horſes conveyed them. The ſubſiding of this bog is remarkable; if I ſhould ſay from fifteen to twenty feet, I think that I ſhould not exceed: when I firſt cut the new river, the bog roſe in a hill between it and the old river; there is now a fall the whole way, except where the hill ſtood, which is the loweſt part. The bog is now ſo firm as to bear a loaded cart. I ſloped the ſides of the hollows, where for ſome years I had cut turfs; being adviſed to cut the bog away, but that would be the work of ages; and where the ſurface was cut off proved moſt barren, and required moſt manure: theſe hollows are now little green vales; and poſterity will puzzle, as ſome do at preſent, to find the cauſe of them. After the firſt crops were taken off, and mowed for two or three years, I obſerved little tufts of heath began to appear in the meadows; where theſe appeared, ſome parts I tilled again; put dung upon others; but lime effectually baniſhed them; and ſo did a mixture of kelp and aſhes, the refuſe of the bleach-green, which proved the richeſt manure. I ſpread river-mud upon one or two acres, which had little effect, only produced a ſedgey ſpirey graſs, until dung was laid over it; marle had ſomewhat a better effect than the river-mud,

but

but marle, mixed with dung, proved very good; lime, dung, or kelp, broke fine into powder, proved the beſt. I reclaimed above one acre, by gravelling, and laying a coat of freſh lime over the gravel, and planted potatoes upon the lime, without any dung; the potatoes were ſmall, and lay thin when dug out, but the corn, which ſucceeded them, proved very good, and the bog was thereby well-reclaimed. It ſhould be obſerved, that all the ſtone and gravel of this country is lime-ſtone. I tried to reclaim part by burning, but the red bogs, which mine were, proved too wet and ſpongy; the aſhes were white, and ſo light that they had little effect. In the manner I have deſcribed, I reclaimed about five acres of the ſouth bog, which lay within the navigable line; but not being able to purſue my navigation into this bog, the gravel at the bottom of the bog riſing above the level of my upper river, without conſiderable expenſe, and the addition of another water-lock, I made a firm gravel road into the bog, firſt dividing one of the large diviſions, made by my father, by two croſs drains ten feet wide, into four diviſions, which made the bog pretty dry; I then laid dung, two or three inches thick, upon the ſurface of the bog, without any gravel or other manures under: I obſerve, that the crops of potatoes, corn, and meadow following, were full as good as thoſe where the gravel was firſt laid on, which in wet bogs ſink too ſuddenly; I would therefore adviſe, and intend to purſue, the laying on of gravel after the bog has been mowed for two or three years: the

expenſe

expenſe of gravelling an acre at the firſt, is, at the leaſt, from four to ſix pounds; and as you proceed further into the bog, the expenſe muſt increaſe; therefore where dung is to be had in plenty, it is the beſt material for reclaiming a bog; but I think that compoſts made with lime and earth mixed, or lime and moor, may anſwer the end of dung, which I have not yet ſufficiently tried, but intend ſo to do.

To enumerate ſeveral other drains which I made in the eaſt and ſouth bogs, to prepare them for reclaiming, would prove too tedious. I uſually cut them ten feet wide; but it is difficult in a wet bog to aſcertain the depth of a drain until the bog has ſubſided for years. In making the drain, which I have mentioned from the lake to the river, 30 or 40 men working in the ſame part of the drain for four or five days without intermiſſion, except at night, could not bring the drain, in the evenings, to be deeper than from one to two feet deep, and both the overſeer and men were all ſo out of patience, that they were with difficulty perſuaded to continue the work; but as I rode round the bog, I obſerved that the bog was ſubſiding, and that they were gaining the level, though they did not perceive it; for the ſluſh flung by the ſhovels out of the drain preſſed down the bog and ſqueezed out the water into the drain which ran off, as I begun where the fall lay; the bog was ſo ſoft that the men were obliged to ſtand upon boards as they worked, to prevent them from ſinking: the bogs which I firſt reclaimed

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are ſtill ſubſiding. I had, the laſt ſummer, 32 acres of the bogs, which I have deſcribed all under tillage and meadow; I alſo mowed ten acres of the bottoms on the river ſides, between the reclaimed bogs; and other ten acres of bottoms by the ſame river, made meadow by banks caſt up round them, to guard againſt floods, planted with alder and ſallows: I have ſix acres more of the eaſt bog reclaimed by a coat of gravel only, never tilled, but reſerved for paſture; but they are far inferior to the tilled bogs, and will not be meadow until covered with other manure, and tilled. I cannot aſcertain the depth of ſeveral parts of my reclaimed bogs, as my borer of 18 feet long does not reach the bottom of the north and eaſt bogs; the ſouth bog is all 12 and 13 feet deep: but towards the verge they are ſhallower. The navigable lines which I have deſcribed, encompaſs 31 acres, except on part of the weſt ſide, where my houſe ſtands; theſe I call my garden or ſmall farm, through which the old river winds; clumps of ſpruce fir, beech and alder, grow well on the ſides of the new river, where gravel was thrown on the banks from the bottom when it was firſt made; the broad-leaved elm interſperſed through the meadows reclaimed from the bog, alſo thrive; I have two ſmall groves on each ſide of the water lock, of a ſpontaneous growth, from the deep reclaimed bog, conſiſting of quicken or mountain aſh, birch, holly, and ſallow, ſome of which are from 17 to above 20 feet high. In making my navigable line, which runs weſt to the

the edge of my lawn, I diſcovered by my borer that a bed of white marle, at the depth of 16 feet, lay under the north bog; the bed of marle proved to be five feet thick, under which lay a ſtratum of gravel, from ſix to nine inches thick, under which ſtratum of gravel lay another bed of marle, four feet thick. In the laſt dry ſummer, by the aid of my ſcrew-pumps, I raiſed a great quantity of this marle, which leads me to claim a medal for reclaiming dry heathy mountain, upon which, after ploughing, I ſpread the marle. But I fear that I have tired you, as I have myſelf, and ſhall for the preſent, only preſent my reſpects to the Society, and aſſure you that I am,

Dear Sir,

Your moſt obedient Servant,

ROBERT FRENCH.

It may be objected that the works were begun previous to the publication of the premiums; I doubt whether it be poſſible to reclaim ſuch bogs in leſs than eight or ten years; the water muſt have time to ouze from ſponges, which ſuch bogs are: to reclaim them very expeditiouſly would exceed the expenſe of a private fortune.

To the Rev. Peter Chaigneau, aſſiſtant ſecretary to the Dublin Society.

Mr.

Mr. French remarks, that the expenſe of improving bogs, equally ſpongy and wet, with this, is very conſiderable, for the drains will for ſome time fill up almoſt as faſt as made. When the draining is finiſhed, the main drains ſhould be left five feet deep, and the breadth juſt ſufficient to keep the banks up: croſs drains, of a ſmaller dimenſion, muſt be made, which, when the bog is perfectly drained, may be filled up again. As to the expenſe, he obſerves, that it muſt neceſſarily vary greatly: but the very worſt ſort may be completely done for 6l. an acre. Manuring with gravel, lime, or clay, may in general be eſtimated at 6l. Then Mr. French would by all means plant potatoes, in the trenching manner, for the ſake of mixing the manure, which is laid on with the ſurface of the bog, and alſo for the uſe of the trenches, as ſurface drains. The crop of potatoes, if a moderate quantity of dung is ſpread for them, will be equal to any in the country, that is, worth 10l. an acre; but if no dung, they will not more than pay the expenſe of ſeed, planting, and taking up. In the ſpring after, dig it ſlightly, level the trenches, and ſow oats; the digging will not coſt more than 10s. an acre. The crop of oats will be 12 barrels, or rye, will be a great produce. With this corn, the graſs ſeeds ſhould be ſown; rye graſs *(lolium perenne)* and white graſs *(holcus lanatus)* do well; common hay ſeeds good. The firſt year a car muſt not go on, but the hay brought off by men. The ſecond year it will bear cars, and would then let for 10s. an acre, for three years only;

21s. an

21s. an acre for hay. After that, a freſh manuring, with a compoſt of lime and earth, or lime and gravel, and then would let at 15s. If the land for potatoes is well dunged, the poor will pay 4l. an acre for it; and the hay, inſtead of 21s. will let at 3l.

In relation to his mountain-moor improvement, the ſtate of the ſoil before improving was that of continued heath, *(erica vulgaris)* with great quantities of lime-ſtones on the ſurface. Mr. French, in the firſt place, ploughed it with ſix bullocks, which did not do more than one-fourth of an acre a day, as the roots of the heath made it ſtrong work. As they turned up the ſtones, or were impeded by them, they were drawn away in cars to make the walls. Left it after the ploughing from half a year to a year, and then broke it, croſs-ploughed, and harrowed it; in all four ploughings; after the laſt, harrowed it ſmooth, and limed. Began with 60 barrels an acre, but increaſed it to one hundred, and to two hundred, and found the crops better and better, in proportion to the quantity. Upon the liming ſowed the wheat, and harrowed it in. The crop has been generally from five to ſeven barrels an acre. The following year either barley or oats: of barley, the crops have been middling, about eight barrels. If oats, twelve barrels. After either the barley or oats, another crop of oats, equally good, and with that ſowed hay ſeeds, or rye graſs and clover. Before the improvement it let at 4s. 9d. twenty-five years ago, and if the ſame

ſame heath was to be ſet out now, it would be worth eight ſhillings. After the oats above-mentioned, has ſet it readily at 14s. Dividing the lands into diviſions of from fifteen to twenty-acred pieces, clears them of ſtones, and the expenſe of the walls, is

	s.	d.
Drawing the ſtones -	2	6 per perch.
Building dry - -	1	1
	3	7
If coped and daſhed, the additional expenſe will be - -	2	6
	6	1

They are all lime-ſtone lands, and make very fine ſheep-walks. Before the improvement very many ſheep died on theſe grounds, of the red-water, but ſince the liming this has not happened; nor would it before give flax, but now very fine.

Mr. French burns the lime in perpetual kilns with turf, laying in the turf and ſtone in layers, the ſame as culm, and all expenſes included, amount to 4d. a barrel roach, of 32 gallons. Two cubical yards of turf will burn one cubical yard of ſtone. If the turf is very good, one and an half will do. He tried French kilns, in which he burned 1500 and 2000 barrels, but found it very uncertain, frequently having the ſtone come out unburnt. A kiln of 1500 barrels, comes to 25l. but often it ran to 40l. he has upon the whole, found it far better

to

to uſe the other ſort, which are cheaper, and more certain. Another ſort of mountain land, is the wet, boggy ſort, one to four feet deep, which he improved by digging off almoſt all the bog for lime; then ploughed it with ſix bullocks, and let it to the poor from a guinea to thirty ſhillings an acre, for them to burn, harrow, and plant potatoes; after which they pay as much more for a crop of oats. Then limes it, takes another crop of oats, and ſows graſſes with it; after this improvement, lets as well as the other. White marle, from under a bog, Mr. French tried, for improving fourteen acres of dry mountain land; the effect was much the ſame as that of lime, but more expenſive, from the difficulty of getting it. In the year 1744, when Mr. French came to his eſtate, there was no other linen manufacture than a little *bandle* linen, merely for their own conſumption, with no other ſpinning than for that, and even for this, there was not more than one loom in 100 cabbins. In 1746, he undertook to eſtabliſh a better fabric, and with more extenſive views. He firſt began by erecting ſpinning ſchools, and ſowing flax, twenty-one acres of which he ſowed on his own account. The linen board gave at that time one penny a day to all children that went to any ſpinning ſchools, which was of uſe; but the providing flax Mr. French found of the greateſt uſe. In 1749, he eſtabliſhed eight weavers and their families, and the ſame year built a bleach mill, and formed a green, and to carry it on to advantage, ſent a lad into the north, and

bound him apprentice there, in order to learn the whole buſineſs. Upon his return, he managed the manufactory for Mr. French, buying the yarn, paying weavers for weaving it by the yard, bleaching and ſelling it. In this manner it went on for fifteen years; but as in this ſtate it was dependent on Mr. French's life, he enabled this manager to take the whole upon his own account, binding him to keep every weaver on the eſtate employed, whatever might be the number. The progreſs of this undertaking, united with the agricultural improvements, will be ſeen by the following returns of the Moniva eſtate, at different periods.

In 1744. There were three farmers, and ſix or eight ſhepherds and cow-herds.

In 1771. There were two hundred and forty-eight houſes, ninety looms, and two hundred ſixty-eight wheels.

In 1772. Two hundred and fifty-ſeven houſes, ninety-three looms, and two hundred eighty-eight wheels.

In 1776. Two hundred ſeventy-ſix houſes, ninety-ſix looms, and three hundred and ſeventy wheels.

Here, in a few words, is the progreſs of a moſt noble undertaking; and I ſhould obſerve, that it is doubly beneficial from one circumſtance. All theſe weavers are mere cottagers in a town without any land, except a cabbage-garden, by which means they have nothing to do with farming, but become a market to the farmers that

that ſurround them, which is what all manufacturers ought to be, inſtead of ſpreading over the country, to the deſtruction of agriculture. Another circumſtance in which Mr. French has given a new face to Moniva, and its environs, is by planting; he found a conſiderable wood of birch, which being a ſhabby tree, and not improving, he cut them gradually down, and planted oak, elm, and beach, with various other ſorts; he began this thirty years ago, and no year paſſes without his making ſome new plantation. By properly managing this wood of 111 acres, he has made it pay him 150l. a year, ever ſince, and there is now more than thrice the value of timber in it, to what there was when he began. Whatever he has planted has anſwered well, but the growth of the beach is the greateſt. That of the oak is very great, and more flouriſhing than ever Mr. French expected to ſee them at the time of planting. The broad-leaved elm thrives very well upon the bogs, after they are cultivated. Mr. French has tried moſt ſorts of trees in rows along the hedges, but none of them have ſucceeded, the weſt winds cut them in pieces; ſince which he makes incloſures, and plants them thick.

I ought not to forget obſerving that Mr. French ſupports a charter-ſchool at his own expenſe, wherein are from twenty to forty children, conſtantly ſupported, cloathed, and taught to read and write, and to ſpin and weave.

Farms around Moniva conſiſt, principally, of large ſtock ones, from 200 to 500 acres, with very few cabbins upon them; the tillage of the country is principally carried on by villagers, who take farms in partnerſhip. Mr. French's are generally from 20 to 130 acres. There will ſometimes be from ten to thirty families on a farm of 200 acres; but Mr. French finds that they do not thrive well if there are more than ſix families to one farm. The ſoil to the weſt of Moniva, is a lime-ſtone gravel, mixed with a clay, ſome of it upon clay: to the eaſt it is a deeper and richer clay, and lime-ſtone all the way to the Shannon. The whole county lime-ſtone, except the mountainous tracts on the weſt, beyond Loch Carril, and the mountains to the ſouth of Loch Rea. Rents in this neighbourhood riſe generally from 12s. to 16s. except old leaſes, which are 6s. or 7s. The richeſt part of the county is between Lochrea and Portumne, thence to Eyre-court, Clonfert, and Aghrim. The third of the county is bog, lake, and unimproved mountain; but moſt of the latter yields ſome trifling rent, the whole third, perhaps three-pence an acre; the other two-thirds, 12s. at an average. The iſles of Arran contain 7000 acres, belong to John Digby, Eſq; and let at about 2000l. a year. The great tract of mountain is the three Baronies of Eyre Connaught, Roſs, Ballynahinch and Moycullen; they are forty miles long, and fifteen broad, and are in general uncultivated. The principal proprietors are, Robert Martin, Eſq; Thomas French, of Moycullen,

cullen, Eſq; and Patrick Blake, Eſq; of Drum; —Lynch, of Barna; —— Geohagen, Eſq; of Bowown; ——— Lynch, Eſq; Drumrong; Sir John O'Flaharty, &c. Mr. Martin has the largeſt tract; he has let to Mr. Popham, 14,000 Iriſh acres, for three lives, at no rent at all; then three lives more at 150l. a year; and after them for ſixty-one years, at the ſame rent; and Mr. Popham has ſome men at work upon improving, from England and Leinſter. There is lime-ſtone gravel upon a part of the land, but not generally in Eyre Connaught, any more than lime-ſtone; at leaſt according to common report.

Courſes of Crops about Moniva.

1. Potatoes. 2. Bere. 3. Oats. 4. Oats.
1. Potatoes. 2. Flax. 3. Oats. 4. Oats.

There are ſome good tillage farmers towards the Shannon, who ſow graſs ſeeds. They alſo ſow ſucceſſive crops till the land is exhauſted, and leave it for ſome time to graze itſelf. No ploughing or harrowing by the tail, nor any burning the corn inſtead of threſhing, but theſe practices were very common 30 years ago. The meaſure of potatoes is the barrel of 42 ſtone; five plant an acre, the average price 6s. or 8s. at the beginning of the ſeaſon; to 10s. or 12s. at the latter end. The average produce 25 barrels, or 10l. Oats yield about 8 barrels. Of flax, a hogſhead ſows 2 acres. It is but lately that they have ſaved their ſeed, but it is now coming in; a good common crop

is 4 cwt. of ſcutched flax, and the medium price 40s. a cwt. There are conſiderable improvements of mountain, and ſome of bog, that have been carried on by the poor villagers. They dig and burn the mountain, and get by that means very fine potatoes without dung, paying 20s. an acre for it. If they have the land to themſelves, they will, after the potatoes, get good wheat, and after that, ſeveral crops of oats, till the land is exhauſted. Theſe village farmers, I remarked, as I went through the country, were induſtrious in forming compoſts of boggy moor, turf, and lime-ſtone, with what dung they can raiſe. They were now making ready againſt the winter's dung; theſe are for potatoes the following ſpring, and they find it anſwers ſo well that the practice increaſed very faſt. Such of them as are near the bogs, Mr. French gives the bog to them for 10 years rent free, and then they pay him 10s. an acre for it. They drain them, manure with lime-ſtone gravel and a little dung, and plant potatoes, getting fine crops, and good corn afterwards. In one of the bogs which a village was cutting away, the men called Mr. French to it, to ſhew him the old ridge and furrow at the bottom, and he found them perfect. It was 4 feet deep: that this country was once generally cultivated, there are other ſigns. There are vaſt numbers of lime-ſtone gravel pits among the mountain heathy lands, though there is not the leaſt tradition when they were uſed.

The

The principal ſtock in this country is ſheep for breeding, the ſale being wethers, which they ſell fat at Ballinaſloe; and wool, of which they clip from the ewes 4lb. and from the wethers 5lb. ſells now at above 1s. a lb. Mr. French remembers the price of wool, 50 years ago, at 6s. and 7s. a ſtone; 1744 was reckoned a very high year, and he ſold 27 bags, at 10s. 6d. a ſtone: but as he got out of ſtock, he has not ſince had more than two bags. In 1745, &c. it fell to 8s. a ſtone. The great riſe of the price of wool, Mr. French attributes to the low price of ſpinning and the increaſe of tillage. The ſtock farmers who are good managers, all have two farms, one as a dry one, in this neighbourhood for winter, and another in the deeper richer lands in the eaſtern part of the county, for ſummer feeding and fatting. Three year old wethers, from the light ſoils here, ſell at from 15s. to 25s. each. It is reckoned good land here that will ſupport three ſheep per acre the whole year round. The ſyſtem of grazing is to buy yearlings, at from 35s. to 3l. 3s. and ſell out at four year old, at from 4l. 4s. to 6l. 6s. They ſometimes ſell them at three year old.

They plough with horſes, but the gentlemen moſtly with oxen; they have not the Mayo cuſtom, of walking backwards before them, nor do they harneſs them all abreaſt, but two and two. They winnow all their corn in the field to blow away the chaff. They will take a grazing farm, with three years rent, for ſtock.

ſtock. Land ſells at 21 years purchaſe. The rents have fallen ſince 1772, but are now riſing from the greater price of wool, black cattle, and linen. Tythes are compounded by the proctors with gentlemen, but they ſcrew up the poor people to the utmoſt. There are ſtill many men who make it their buſineſs to hire large tracts of land in order to re-let at advanced rents. Population increaſes greatly, yet many of them live very poorly upon potatoes and water, with ſome oatmeal. There are many that have no cows, only a houſe and a garden. The graſs of a cow is 30s. This is not the caſe, however, at Moniva; there they have all cows, and are very rarely without milk. Rent of a cabbin and an acre, 20s. building the cabbin for themſelves; and 30s. if it is built for them. There were many emigrants from Galway to America, but only of the looſe idle people. The general religion is roman catholic, but about Moniva chiefly proteſtant.

Mr. Andrew French, of Rathone Galway, who I met at Moniva, favoured me with the following particulars. At Galway there is a ſalmon fiſhery, which lets at 200l. a year; and in the bay of Galway they have a conſiderable herring fiſhery. There are belonging to the town 200 to 250 boats, 40 or 50 of which are employed in the ſpring fiſhery, for cod, hake, mackarel, &c. &c. Theſe boats are from 4 to 6 tons, ſome 9 tons. They coſt building, 20l. a boat, and the nets and tackle, 15l. the nets

nets are of hemp, tanned with bark. There are five or ſix men to a boat; they fiſh by ſhares, dividing into ſixty: they have had this fiſhery time immemorial. The plenty of fiſh has decreaſed theſe 15 years. A middling night's take is 5000 fiſh; all they get is ſold into the country, and the demand is ſo far from being anſwered, that many cargoes are brought in from the north. The fiſh ſell at 1s. 4d. to 2s. 2d. a hundred; but the men are far from being induſtrious in the buſineſs: ſome weeks they do not go out twice.

On the coaſt of Conna Marra there is, from the 10th of April to the 10th of May, a fiſhery of ſun-fiſh, which is done by the herring boats. It is not by ſhares, but the owners of the boats hire the men for the fiſhery. One fiſh is reckoned worth 5l. and if a boat takes three fiſh in the month, it is reckoned good luck. There are 40 or 50 boats employed on this. Along the whole bay there is a great quantity of kelp burnt; 3000 tons are annually exported from Galway: the preſent price is 40s. to 50s. a ton. The ſhore is let with the land againſt it, and is what the people pay their rent by. They uſe a great quantity of ſea weed, drove in by ſtorms for manuring land. In November they carry it on, the field being ready marked out in beds for potatoes, and leaving it on them, it rots againſt the planting ſeaſon, and gives them great crops. They alſo do this with fern, cutting it in autumn, and laying it on to the beds, get good crops.

crops. The poor people near Galway are very induſtrious in buying the ſullage of the ſtreets of that town; they give 3d. for a horſe load of two baſkets, and carry it three miles.

One circumſtance, relative to the progreſs of the linen manufacture in this country, the town of Galway can inſtance. Mr. Andrew French of that place, ſixteen years ago, imported the firſt cargo of flax ſeed of 300 hogſheads, and could only ſell 100 of them, whereas now the annual importation riſes from 1,500 to 2,300. Twenty years ago there were only 20 looms in Galway, now there are 180. They make coarſe ſheetings ſeven-eighths wide, at 9½d. to 11d. a yard; dowlas, 28 inches wide, at 7d. Oſnaburgs at 7d. alſo. There are eight or nine bleach greens in the county, but they bleach, generally ſpeaking, only for the country conſumption: the great bulk of the linens are ſent green to Dublin. In the town and neighbourhood of Loch-rea, there are 300 looms employed on linens that are called *Lochreas*, of 28 inches in width, which ſell at 7d. a yard. All the flax worked in the county is, generally ſpeaking, raiſed in it. The yarn ſpun is pound yarn, not done into hanks at all. Very many weavers are in the towns, without having any land more than a cabbage garden. The linen and yarn of the whole county has been calculated at 40,000l. a year.

September

September 3d, left Moniva, and took the road to Woodlawn, the ſeat of Frederick Trench, Eſq; paſſed many bogs of conſiderable ſize, perfectly improveable, and without the uncommon exertions I have juſt deſcribed, none could be more anxious for my information than Mr. Trench.

Woodlawn is a ſeat improved entirely in the modern Engliſh taſte, and is as advantageous a copy of it as I have any where ſeen. The houſe ſtands on the brow of a riſing ground, which looks over a lawn ſwelling into gentle inequalities; through theſe a ſmall ſtream is converted into a large river, in a manner that does honour to the taſte of the owner; it comes from behind a hill, at the foot of which is a pretty cottage hid by plantation, and flows into a large maſs of wood in front of the houſe: the grounds, which form the banks of this water, are pleaſing, and are prettily ſcattered with clumps and ſingle trees, and ſurrounded by a margin of wood. The houſe is an excellent one, ſo well contrived, that the ſame diſpoſition of apartments would be agreeable upon almoſt any ſcale of building.

Mr. Trench's improvements of bog made me ſolicitous to view them; he was ſo obliging as to give me a full account, which is as follow. The firſt method of improving he took was with a bog of 12 acres, exceedingly wet, at the bottom of hills 16 feet deep to his knowledge, but he never yet was able to meaſure

ſure it to the bottom. A red bog, of a light fuzzy ſubſtance, like a bed of tow, which would not burn in turf; no other product than bog berries. Part of it ſo very wet, that could not cut the drains at firſt wider than four feet and two ſpits deep; repeated this before the hard froſt of 1765; had yet made no progreſs, it being almoſt as wet as ever: but took advantage of that froſt, to cover the ice two inches thick with clayey gravel; when the thaw came, the gravel ſunk, and preſſed out the water. The expenſe of this manuring was 3l. 10s. an acre. This gravelling had ſuch an effect, that in the May following about half of it bore horſes with baſkets, for carrying on dung, and where it would not bear them, it was carried on by men. The quantity ſix buſhels to the ſquare perch, and immediately planted with potatoes in the common trenching manner. The crop, per acre, 40 barrels each; 44 ſtone, at 8s. each. Levelled the potatoe trenches in digging for barley, in doing which attended minutely to not burying the manure; this digging coſt 30s. an acre, and the barley covered with the ſpade, which they do very faſt, and the expenſe included in the 30s. The crop of barley 10 barrels an acre, at 8s. After this crop, took no more trouble with it; very rich and luxuriant graſs ſprang up directly, and would let readily in meadow, at 25s. but part of it in a few years would let at 2l. Two acres of it were not perfectly reclaimed; it was of the moory nature; dug and burnt it, and put in turnips, the

the crop very good: then dug it for barley, the produce 14 barrels an acre, and the meadow very good ever ſince. I was over it, and found it a perfect improvement; the hay was fine, the herbage good, and carried the complete appearance of a meadow, except in the drains, where the heath ſtill appears.

NUMBER 2.

Twenty-five acres of ſpungy fungous bog, from 8 to 16 feet deep, had been cut into very great turf holes, which holes, though they held water, and had drowned many a cow, yet had ſo far drained the bog as to make the leſs draining neceſſary; effected it, and then levelled the holes; but as they ſunk much, levelled them a ſecond time. Upon this, took the advantage of a froſt to manure it with clay and gravel, at 2l. 10s. an acre; then dunged a part with the quantity mentioned already, and the reſt of it manured with the aſhes of moor, which burnt yellow. Upon this manuring, planted potatoes; the crop 10l. an acre, pretty equal being, as good after the aſhes as after the dung. After the potatoes, levelled the trenches, and dug it and ſowed wheat; the crop 6 barrels an acre; barley 10 barrels, oats 9 barrels: then left it for meadow, the value 2l. an acre.

NUMBER 3.

Another piece of bog the ſame ſort, light and ſpungy; drained, and then manured with clayey

clayey lime-ſtone gravel, mixed with ditch earth. In the ſummer planted potatoes; the crop 15 barrels an acre; then dug for oats 6 barrels an acre, meadow ever ſince, and perfectly good, would let at 1l. 10s. an acre.

Number 4.

Another bog of the ſame ſort perfectly well drained, manured with lime, 80 barrels an acre, at 4d. a barrel; planted potatoes; the crop not worth digging; dug it for oats, the crop not worth reaping: then left it in graſs, which was indifferent, not worth more than 5s. an acre.

Number 5.

Another experiment was on the ſame ſort of bog, which, when well drained, was manured in ſpring with lime-ſtone gravel, and then with marle inſtead of dung, and planted with potatoes; the crop 4l. an acre: then dug it for oats; the crop 6 barrels, and then left to graſs; worth 1l. 5s. an acre.

Number 6.

Another experiment, the ſame as the preceding, except lime laid inſtead of marle: the effect in every reſpect on a par with the marle. Neither of them yielded half the produce which dung or aſhes would have done.

Num-

NUMBER 7.

Another bog of the ſame ſort was, after draining, manured with lime-ſtone gravel, and then with the ſcowering of ditches and earth, to the amount of 3 ½ inches deep on the ſurface: expenſe in all 4l. an acre. Then left, and nothing more done to it; very good graſs came the next ſeaſon, worth for grazing 18s. an acre.

NUMBER 8.

Another ſpongy bog drained, and then well gravelled, at 2l. 10s. Left ſo for three years; ſcarce any graſs came, the heath ſtill remaining: planted potatoes on it without any dung or other additional manure; the crop 4l. an acre; then dug it ſmooth, and nothing ſown in it, but came immediately to very good paſture, worth 15s. an acre.

Mr. French recommends, from his experience, the following mode of improving bogs: firſt, the great object is draining; main drains ſhould be made on each ſide the bog, near the firm land; theſe cuts ſhould be ſix feet deep and eight wide, and will coſt 1s. a perch. Then croſs drains from main drain to main drain, at from 5 to 10 perch from one to the other, at three feet deep and four wide, at the expenſe of three pence a perch. Here is the firſt year's work. The next year go into all the drains and ſink them, which will coſt 1d. a

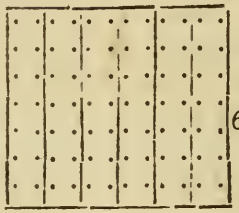
perch: if a froſt comes, carry on the lime-ſtone gravel, let it be a coat of two inches thick; if three it will be better; two inches will coſt 3l. if not carried farther than half a quarter of a mile; if carried a quarter of a mile, it will coſt 4l. 10s. if half a mile, 6l. 15s. if a mile 9l. Prefers the clayey lime-ſtone gravel to every other manure: if that is not to be had, clay; and if not clay, other gravel; if no gravel or clay, then lime; if nothing elſe, then the light marle under bogs. Upon this manuring ſpread a compoſt, one-third dung, one-third ditch earth, and one-third lime-ſtone gravel, nine buſhels to the ſquare perch; if dung only, ſix; and upon that plant potatoes in the common manner. The crop will, on an average, be 30 barrels, at 8s. or 12l. an acre. The poor people will readily give three or four guineas an acre for liberty to plant them. Upon this crop of potatoes ſpread two buſhels of dung more to the perch, and plant a ſecond crop of potatoes, making the furrows where the ridges were, and make the ridges of both crops nine feet wide, and the trenches four. This crop of potatoes will be full as good as the firſt. Then dig it, levelling the trenches, ſcooping the ſides, to fill up with, and the manured part on the ſurface; ſow barley; the crop will be 12 barrels on an average; with this barley ſow graſs ſeeds, and it will immediately be worth for meadow 1l. 10s. Let this go on for ſeven years; then give it a light gravelling, at 1l. 10s. an acre; dung it four buſhels per perch; plant potatoes, 12l.

an acre; then barley 14 barrels; and then meadow worth 40s. In this circumſtance of letting meadow it ſhould be remarked, that they will hire it at great prices, ſuch as minuted, but the ſame lands would not let at more than 18s. upon a leaſe; for in one caſe you ſtand the chance of keeping the land to its preſent heart, and in the other the tenant has that chance.

There is a circumſtance which ſhould be mentioned, the ſkin of the turf ſhould not be broken for ſome years by heavy cattle; for wherever they make a hole, the ruſhes grow at once, which cannot be eaſily deſtroyed. Mr. French does not think it at all neceſſary to keep an improved bog under graſs, as he has found by experience, that the more they are cultivated the better they grow. In the winter he feeds his reclaimed bogs with ſheep; they have a perpetual ſpring of graſs all through that ſeaſon, and are of a nature ſo contrary to that of rotting ſheep, that they will recover thoſe which are threatened with that diſtemper.

He has planted ſeveral large clumps in his reclaimed bogs, and has found that almoſt every kind of tree thrives well in them: I thought the ſpruce fir ſeemed to get up the quickeſt, but all of them appeared perfectly healthy.

Calculation of improving a ſquare mile upon the preceding plan.



9 miles of main drains.
64 miles croſs ditto.

2881 perches of main drains, at 2s. -	288	0	0
20480 perches of croſs drains, at 6d. -	511	19	9
Two miles of road, 10 feet wide, at 75l.	150	0	0
Gravelling, on an average of the diſtance, 6l. per acre - - -	3840	0	0
Labour on the dunging, 40s. per acre -	1280	0	0
	6069	19	9
Deduct rent of the land for potatoes, at 3l.	1920	0	0
	4149	19	9
Manuring ſecond crop of potatoes, labour 20s. an acre - - -	640	0	0
	4789	19	9
Deduct rent for potatoes, as before -	1920	0	0
	2869	19	9
Levelling and digging for the barley, 30s. an acre - - - -	960	0	0
	3829	19	9
A barrel an acre of barley ſeed, 8s. an acre -	256	0	0
Reaping, harveſting, and threſhing, 20s. an acre - - -	640	0	0
	4725	19	9

Brought

Brought over	4725	19	9
Deduct the value of the crop, 9 barrels, at 8s.—3l. 12s. an acre - -	2304	0	0
Remain total expences of the improvement £.	2421	19	9

Rent of 640 acres, at 16s. an acre, 512l. which income is 21l. per cent. for the expenditure of 2421l.

Several very great deductions are made in this account, becauſe the bog is ſuppoſed to be a very large one.

Mr. Trench buys in year-old bullocks and ſome ſpayed heifers, at 1l. 15s. each; ſells them out at three-years old, good ſtores, but not fat, at 6l. 3s. on an average. He has 930 ſheep, conſiſting of 300 ewes, 180 lambs, 270 yearlings and two-year olds, and 180 fat ſheep. The annual ſlaughter and ſale is 180 fat wethers, at 1l. 3s.—60 culled ewes, at 15s. In order to ſave dung for his bog improvement, he has cut a large drain from his yards and ſtables through the garden, paved it, and keeps it filled with bog earth, and all the urine of the cattle, &c. running into it, makes an excellent compoſt for the gardener.

Average rent of the improved part of the county of Galway, 14s. an acre. About Woodlawn 14s. to 18s. The ſoil all lime-ſtone gravel, or lime-ſtone fine ſound land. The ſize of farms varies; there are many ſmall ones of from 30 to 100 acres, part grazing and part tillage; alſo many ſtock ones, up to 1000 and

1500 acres; and theſe graziers re-let to the cabbins part of it at a very high rent, by whom are carried on moſt of the tillage of the country. Mr. Trench remarks, that if good land is let to the poor people, they are ſure to deſtroy it; but give them heath, or what is bad, and they will make it good.

1. Potatoes on the graſs. 2. Summer fallow. 3. Wheat. 4. Oats. 5. Oats. 6. Lay out. --- No ſeeds.

1. Potatoes. 2. Barley. 3. Wheat. 4. Oats. 5. Oats. 6. Oats.

1. Potatoes on graſs. 2. Gravel and fallow. 3. Wheat. 4. Barley. 5. Oats. 6. Leave it for graſs.

1. Potatoes. 2. Flax. 3. Wheat. 4. Oats. 5. Oats. 6. Lay out.

Average produce of potatoes, 30 barrels, at 42 ſtone, at 8s. or 12l. Of wheat, 8 barrels, at 20 ſtone. Of barley, 12 barrels, at 16 ſtone. Of oats, 12 barrels, at 14 ſtone.

Every poor man ſows ſome flax, but ſtill they do not raiſe enough for their ſpinning, for that is univerſal. Lime-ſtone gravel is the general manure. No lime, though it is every where to be had; the price to burn is 4d. a barrel of 3 buſhels roach. Every cabbin has eight or nine acres, and two or three cows, or two

two cows and one horſe; and about half have horſes, two or three pigs, and many poultry; half a rood of flax, one acre potatoes, or half at a medium. They live on potatoes, oats, or barley bread, or butter; like oats much better. Their circumſtances are much improved in 20 years. They pay rent 12s. to 14s. an acre for their lands.

September 4th, to Kiltartan, the ſeat of Robert Gregory, Eſq. who is engaged in purſuits which, if well imitated, will improve the face of the country not a little. He has built a large houſe with numerous offices, ahd taken 5 or 600 acres of land into his own hands, which I found him improving with great ſpirit. Walling was his firſt object, of which he has executed many miles in the moſt perfect manner: his dry ones, 6 feet high, 3 feet and a half thick at bottom, and 20 inches at top, coſt 2s. 6d. the perch, running meaſure. Piers in mortar, with a gate and irons complete, 1l. 14s. Walls in mortar, five feet high, coſt 6s. a perch. He has fixed two Engliſh bailiffs on his farm, one for accounts and overlooking his walling and other buſineſs; and another from Norfolk, for introducing the turnip huſbandry; he has 12 acres this year; and what particularly pleaſed me, I ſaw ſome Iriſhmen hoeing them; the Norfolk man had taught them; and I was convinced in a moment, that theſe people would by practice ſoon attain a ſufficient degree of perfection in it. The ſoil around is all a dry ſound good lime-ſtone land, and lets

from 10s. to 12s. an acre, ſome at more. It is in general applied to ſheep. Mr. Gregory has a very noble nurſery, from which he is making plantations, which will ſoon be a great ornament to the country.

September 5th, to Drummoland, the ſeat of Sir Lucius O'Brien, in the county of Clare, a gentleman who had been repeatedly aſſiduous to procure me every ſort of information. I ſhould remark, as I have now left Galway, that that county, from entering it in the road to Tuam till leaving it to-day, has been, upon the whole, inferior to moſt of the parts I have travelled in Ireland in point of beauty: there are not mountains of a magnitude to make the view ſtriking. It is perfectly free from woods, and even trees, except about gentlemen's houſes, nor has it a variety in its face. I do not, however, ſpeak without exception; I paſſed ſome tracts which are chearful. Drummoland has a pleaſing variety of grounds about the houſe; it ſtands on a hill gently riſing from a lake of 24 acres, in the middle of a noble wood of oak, aſh, poplar, &c. three beautiful hills riſe above it, over which the plantations ſpread in a varied manner; and theſe hills command very fine views of the great rivers Fergus and Shannon at their junction, being each of them a league wide. For the following particulars I am indebted to Sir Lucius O'Brien.

Average

Average rent of the county of Clare, 5s. The bad tracts of land in the county, are the eaſt mountains, part of the barony of Burrin, and the great peninſula, which forms the north ſhore of the Shannon. Great tracts are let at nothing at all, but there are 20,000 acres from Paradiſe hill, along the Fergus and Shannon to Limerick, which let at 20s. an acre. Theſe lands are called the *Corcaſſes*. The ſoil of them is either a rich black loam, or a deep rich blue clay; and all the higher lands are lime-ſtone, or lime-ſtone gravel. The mountains are generally grit-ſtone. The ſize of farms is various, Captain Tim. Macnamara farms 7000 acres, but part in other counties. Mr. Singleton, 4000 acres. A farm of 300l. a year is a very ſmall one; 500l. a year middle; this is ſpeaking of ſtock-farms. The tillage of the country is carried on by little farmers, from 20l. to 100l. a year; but moſt of it by the poor labourers, who are generally under-tenants, not holding of the landlords. The courſes of crops are,

1. Potatoes. 2. Bere. 3. Wheat. 4. Oats. 5. Oats. 6. Oats. 7. Lay it out to graſs.

1. Beans. 2. Bere. 3. Barley. 4. Wheat. 5. Oats. 6. Oats. 7. Oats. 8. Lay it out, or beans again.

Of wheat they ſow 10 to 15 ſtone an acre; the crop, in the corcaſs grounds, 8 barrels, in the other lands 5 or 6: 20 ſtone to the barrel.

Potatoes

Potatoes they meaſure by the barrel of 48 ſtone: they plant 6 to the acre, and the average produce 50 barrels. They never plant them on the corcaſs lands, for they will not grow there. Mr. Fitzgerald, of Shepperton, has had 100 barrels per acre; the favourite ſorts are the apple, the Caſtania, the Buck, being a ſpecies of the Howard. They fat pigs on them; but what much amazed me, was fattening hogs on graſs, which they do very generally, and make them as fat as a bullock, but put them up to beans for three weeks to harden the fat. Of barley they ſow 14 ſtone an acre, and get ſix barrels, at 32 ſtone each. Bere, two rowed barley, called *Engliſh* here, and four rowed, called *Dutch*, and of theſe the bere yields beſt. Mr. Singleton has had 40 barrels of bere per acre, each 16 ſtone on the corcaſs land. Of oats they ſow 21 ſtone to the acre, and get 12 barrels, on an average 14 ſtone each; and on the corcaſs land 16. Of beans they ſow 35 ſtone to the acre, ſow them on the green ſod ſoon after chriſtmas, and plough them in; never hand-hoe or weed them: the average crop 20 barrels, at 20 ſtone; 30 the greateſt; they are uſed for home conſumption in dear years, and for exportation in cheap. The poor people make bread of them, and eat them boiled, and they prefer a buſhel of them to a buſhel of wheat; but they will not eat them, except in a ſcarcity. No peaſe ſown, but rape in conſiderable quantities in mountain grounds, or boggy, both of which are burnt for it. They plough the furrow

furrow very ſhallow, and burn it: they never feed it. The crop of ſeed 8 barrels, at 16 ſt. at from 7s. 6d. to 18s. a barrel, generally from 14s. to 17s. It is preſſed into oil at the mills of ſix mile bridge and Scariff, near Killaloe; but the greateſt part is bought up by the merchants of Limerick for exportation for Holland, and laſt year ſome part of it has been ſent to Great Britain, in conſequence of the act which paſſed laſt ſeſſions. The rape cakes are all exported to England for manure: the price of them at 45s. or 42s. per ton. The rape and the bean ſtraw are burnt to aſhes for the ſoap boilers; and Mr. Singleton has a kiln contrived on purpoſe for burning lime with it, collecting the aſhes at the ſame time that the lime is burnt. No clover is ſown, except by Sir Lucius O'Brien. Flax is ſown in ſmall quantities by the poor people for their own conſumption; and ſome yarn ſold, but not much from the whole county. Spinning is by no means general; not half the women ſpin. Some linens, bandle cloths, and Clare dowlas, for exportation in ſmall quantities, and other ſorts, enough for home conſumption. Wool is ſpun for cloathing for the people, into worſted yarn for ſerges, and into yarn for ſtockings. Great quantities of frizes are ſold out of the country.

Much heath waſte land, many hundreds of acres every year are brought in by paring and burning for rape, but uſe no manure for it; after that wheat, and get good crops, and then

then two, three, or four crops of oats, good ones; then left for graſs, and comes tolerable herbage, worth 5s. an acre.

The principal grazing ſyſtem conſiſts in a union of both rearing and fattening; the rearing farms generally at a conſiderable diſtance from the rich lands on the Fergus and Shannon. The moſt profitable management of grazing, is to buy in year-olds upon this ſyſtem, but it can only be done, by hewing a variety of land, commonly at a diſtance. It is found much more beneficial than buying in bullocks in autumn, and cows in May, as the Meath graziers do.

The average price of the year-olds, is from 2l. 2s. to 2l. 10s. and the price ſold at four and a half year-olds, weighing 4½ cwt. 4¾, to 5¼ cwt. is on an average at 8l. For cows bought in in May, 3l. 3s. to 3l. 12s. and ſell at 5l. 10s. An acre of the corcaſs land will fatten one of theſe bullocks, but then it muſt not be winter-fed at all. Sheep, on an average, ſhear three to a ſtone of 16lb. and ſell at 1s. per. lb. Mr. Macnamara ſold this year 55 bags, beſides his lambs wool; the weight is from ſix hundred, to ſeven and a half, fifty ſtone, and this year's price 17s. 6d. a ſtone. Upon the lime-ſtone ſheep-walks of this county, they keep from one and a half to five; on an average, three. The loſs on ſtock-ſheep, bullocks, &c. will not amount to more than one per cent. on the value. For hiring and ſtocking

ing a grazing farm, three rents are reckoned to do. Thoſe bullocks that are to be fattened the ſummer following, they give hay moſt part of the winter, for four or five months, as much as they will eat, which will be half an acre of good meadow.

There are 4000 bullocks fattened annually in the county of Clare; bought in at 6l. and ſold out at 10l. and 3000 cows, bought in at 3l. and ſold fat at 5l. alſo 6000 fat wethers, ſold out of the county annually at 20s. each.

This country is famous for cyder-orchards, the cakagee eſpecially, which is incomparably fine. An acre of trees yields from four to ten hogſheads per annum, average ſix, and what is very uncommon in the cyder counties of England, yield a crop every year. I never beheld trees ſo loaden with apples as in Sir Lucius O'Brien's orchard; it amazed me that they did not break under the immenſe load which bowed down the branches. He expected a hogſhead a tree from ſeveral.

Land ſells at twenty years purchaſe. Rents fell in the rearing lands 5s. or 6s. in the pound, but rich lands fell very little. Tythes are compounded by a compoſition made every year by the piece. Fat bullocks nothing. Sheep, 20s per hundred. Wheat, 5s. Barley 3s. Oats, 2s. Potatoes, 10s. Middle men, not common, but much land re-let, ariſing from the long tenures which are given of three lives, &c.

The

The poor live upon potatoes ten months of the year; but if a mild winter, and a good crop, all the year on them. They keep cows very generally, but not ſo many as in the liſt of Sir Lucius's tenants. Labour is uſually paid for with land. Working-days of roman catholics may be reckoned 250 in a year, which are paid for with as much land as amounts to about ſix pounds, and the good and bad maſter is diſtinguiſhed by this land being reckoned at an high or a low rent. The ſtate of the poor, on compariſon with what they were twenty years ago, is that they are much increaſed in numbers, and better clad then they were, and more regularly fed, in being freed from thoſe ſcarcities which were felt before the laws for the increaſe of tillage. Relative to religion, there was a return to the committee of religion, in the houſe of Commons, in 1765, when the return of Clare was as follows, in five diviſions:

No. 1.	896 proteſtants,	16831 catholics
2.	1089	12156
3.	291	2694
4.	99	786
5.	101	4677
	2476	37144
		2476
	Total	3962

16 to 1, and 404 over.

Lucerne,

Lucerne, Sir Lucius cultivated for ſome years, and found while it was attended to, and kept clean, that it was of great uſe for horſes, but his abſence and neglect deſtroyed it. Relative to ſmuggling wool from Clare, he gave me ſeveral ſtrong reaſons for believing that there had not been any for ſome years; that county is well ſituated for it, and ſome ſhips ſmuggled brandy and tobacco, and could carry it away with great eaſe, yet not one goes. Sir Lucius was executor to a man who made a fortune by it twenty-five years ago, but he would never ſmuggle when above 10s. a ſtone; I had the ſame account in Galway. The cauſe of the high price of wool, is the admiſſion of woollen yarn in all the ports of England, and the increaſed demand in the Mancheſter fabric for that yarn, which demand would have operated in England as in Ireland, had the cheapneſs of ſpinning been equal. Another cauſe, the increaſe of population, and the people being better clad. Sending a pound of wool to France, ſmugglers compute to be ſix-pence, which is fifty per cent. on the preſent prime coſt. Thus the French could get wool much cheaper from England, where the prime coſt is lower. There is none from Cork, for being a manufacturing town, the people would not allow it. A duty of 4d. per ſtone of 18lb. on woollen and worſted yarn exported, marks the quantity which Ireland grows beyond its own conſumption. Raw wool, two thouſand to 10,000 ſtone, the reſt yarn, which is nearly doubled in value by the manufacture. The

quantity of broad-cloth and ſerges, that is, old and new drapery, imported from England, equals the export of woollen yarn. It is remarkable that upon the corcaſs lands in this county, there are ſeveral tools in uſe, which are called *Dutch*, a *Dutch* ſpade, a *Dutch* plough, &c.

Particulars of ſome of Sir Lucius O'Brien's labourers.

Men.	Souls per cabin.	Cows	Horſes	Sheep	Potatoes, acres.	Corn, acres	Men	Souls per cabin	Cows	Horſes	Sheep	Potatoes, acres	Corn acres
No. 1.	7	3	1	6	½	3½	No. 25	5	4	1	6	1¼	3
2	5	1	2	8	1	4	26	5	0	0	0	0	2
3	3	2	0	10	1	1	27	6	1	0	6	¾	2½
4	6	2	1	9	1¼	3	28	7	1	0	6	3	2
5	7	2	0	20	¾	3	29	4	1	0	6	1½	2
6	8	3	0	3	½	2½	30	8	3	1	12	1½	2
7	7	1	0	3	1	1½	31	4	1	1	10	1½	2
8	7	3	1	12	1½	1½	32	9	5	1	16	1	2
9	6	0	1	6	½	1	33	6	6	1	6	1½	2
10	5	1	1	4	½	1	34	4	2	0	6	1	2
11	6	1	0	6	½	1	35	7	2	1	11	1½	2
12	5	0	0	0	½	0	36	8	3	1	12	1¾	2
13	5	1	0	4	½	0	37	4	3	1	10	1¼	2
14	3	1	0	6	½	0	38	10	3	1	20	2	2
15	6	0	0	6	½	0	39	10	4	1	12	1½	2
16	3	0	0	6	½	0	40	12	8	2	40	4	3
17	3	0	0	6	½	0	41	7	5	2	20	3	4
18	9	3	0	0	0	1	42	8	5	2	12	3	3
19	3	0	0	0	¼	0	43	—	—	—	—	—	—
20	5	5	1	12	1½	0	Average	267	109	31	381	45¼	89
21	8	5	1	10	2	6		6	3	1½	9½	1	2¼
22	4	4	0	6	1½	4							
23	7	3	1	18	¾	2							
24	8	2	0	6	1	2							

Sir

Sir Lucius O'Brien introduced me to two of the moſt conſiderable graziers in the county, Mr. Singleton, and Mr. Fitzgerald, and rode through a part of their farms. Mr. Singleton's corkaſs meadows were one continued bed of ruſhes, till he deſtroyed them by a method which alone proved effectual, which is digging up the ruſh, and turning it topſy-turvy into the hole again, this he finds effectually deſtroys them, and the expenſe is not ſo great as might be imagined. This gentleman has more tillage-land than common upon grazing farms; he ſhewed me a *haggard*, well filled with wheat ſtacks; ſeventeen acres of that grain yielded him 196 barrels. Mr. Fitzgerald is a very attentive farmer, and in ſeveral particulars, conducts his buſineſs upon principles different from thoſe which are common in Ireland. He has built excellent farming-offices; particularly a barn, exceedingly well contrived; the corn may be thrown at once from the part of the barn where it is ſtowed on to two threſhing floors, the one over another, and from the ſtacks through a window into the barn. His hay is alſo thrown in the ſame manner, down into the cow-houſe, and his potatoes into a vault. Theſe conveniencies, which are a great ſaving of labour, are gained by the buildings being raiſed on the ſide of a ſteep hill, cut away for the purpoſe. His cows he keeps in the houſe all winter, by which means they are better wintered, and he raiſes a great quantity of

of manure. The chaff of his corn crops he ſaves carefully, which is directly contrary to the country; and what is much more, cuts much hay and ſtraw into chaff, with an engine, which he finds to anſwer perfectly well; the man works it with one hand, and ſupplies it with the other, being fixed againſt the wall.

The End of the Firſt Volume.

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